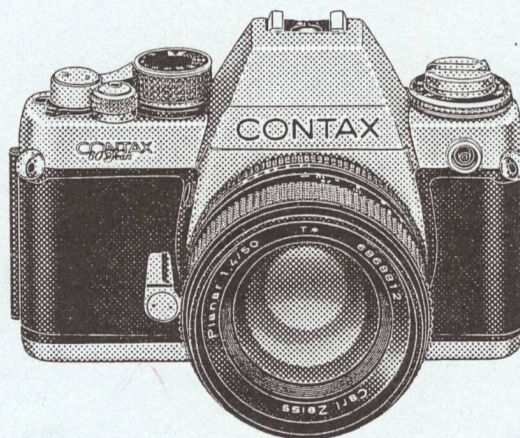


# CONTAX S2

## Repair Manual



KYOCERA CORPORATION  
Optical Equipments Group  
Service Dept. 921230

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## A. DESCRIPTION OF MECHANISM

## FEATURES

1. **Extra-Reliable, Mechanically Controlled High-Speed Shutter** — 1/4000 sec. max. and 1/250 sec. flash synch.

A full fourteen speed, vertically running metal shutter is mechanically controlled, offering a wide range of image freezing or blurring possibilities — all the way from a very fast 1/4000 sec. to an extra slow 1 sec., plus the unlimited lengthy "bulb" setting. Additionally, this mechanical flash offers a very fast shutter speed flash synchronization at 1/250 sec., or slower if greater creativity is desired. Thus even under adverse weather and other conditions, the shutter can be accurately, precisely activated at all speeds, and completely without reliance in battery power.

2. **Enhanced Body Rigidity and Working Reliability** - Titanium top/bottom/front casings, strengthened aluminum diecast body, dust/moisture resistant construction

Superior durability is a byword for the CONTAX S2's construction. By using titanium for the top and bottom covers as well as the front mount section, and adding this to a highly rigid aluminum diecast body, the camera's precision internal mechanisms are well protected, especially against extreme external shock. Also, a number of soft rubber protectors and seals are used in conjunction with major working parts so as to make the camera more resistant to dust, moisture and adverse weather conditions than conventionally designed SLRs.

3. **Highly Accurate Pinpoint Metering System** — Spot-Metering System

To ensure top precision in light measurement, the tried-and proven spot-metering is employed in the CONTAX S2. The light sensor thus measures the brightness of the heavily weighted area essentially equal to that covered by the microprism ring (approx.  $\phi$  5mm) in the center of the viewfinder screen, and is thus not influenced by illumination outside this critical subject area. This reading is then transferred to the overexposure, shutter speed, B, underexposure readout at the right of the viewfinder screen. Similar in style to classic match-needle metering, an LED readout is used, instead of a mechanical needle, because it is faster acting and requires less battery power.



## CONTAX S2 SPECIFICATIONS

|                                   |   |
|-----------------------------------|---|
| Type                              | : 35mm metal focal-plane shutter SLR camera   |
| Lens mount                        | : Contax/Yashica mount  |
| Shutter                           | : Mechanically controlled, vertically-running metal focal-plane shutter   |
| Shutter Speeds                    | : B (bulb), 1 sec. ~ 1/4000 sec.  |
| Flash Synch.                      | : X setting at 1/250 sec. or slower (w/direct X contact and synch. terminal)  |
| Selftimer                         | : Mechanical (delay of approx. 10 sec.)   |
| Shutter Release                   | : Mechanical (w/cable release socket, release lock)   |
| Exposure Control                  | : Manual, TTL spot (approx. $\phi$ 5mm) metering coupled with viewfinder panel readout  |
| Metering Range                    | : EV4 ~ 20 (ISO 100, f/1.4)   |
| Film Speed Setting                | : Manual, ISO 12 ~ 6400   |
| Viewfinder                        | : Fixed eye-level pentaprism finder (long eyepoint) ; 95% field-of-view ; 0.82x magnification (w/standard 50mm lens at $\infty$ ) |
| Focusing Screen                   | : Horizontal split/micoprism center spot on matte field (standard) ; interchangeable  |
| Display in Viewfinder             | : LEDs for (top to bottom) flash indicator, overexposure warning, shutter speeds (in use, preferred), underexposure warning       |
| Film Loading                      | : Easy-loading multi-slotted take-up spool  |
| Film Advance                      | : Manual by lever with 30° stand-off angle, full 135° for advance   |
| Film Rewind                       | : By pushing rewind button and turning rewind crank   |
| Exposure Counter                  | : Mechanical, auto-resetting, additive type   |
| Multiple Exposure                 | : Available using mechanical multi-exposure lever, auto-resetting   |
| Accessory Shoe                    | : Direct X-contact (flash ready with dedicated flash units)   |
| Back Cover                        | : Pull up rewind knob release ; Film advance indicator  |
| Power Source (for exposure meter) | : Two 1.5V alkaline (LR44) or two 1.55V silver oxide (SR44) batteries   |

Battery Check : Automatic (viewfinder battery check mark blinks if power is insufficient)

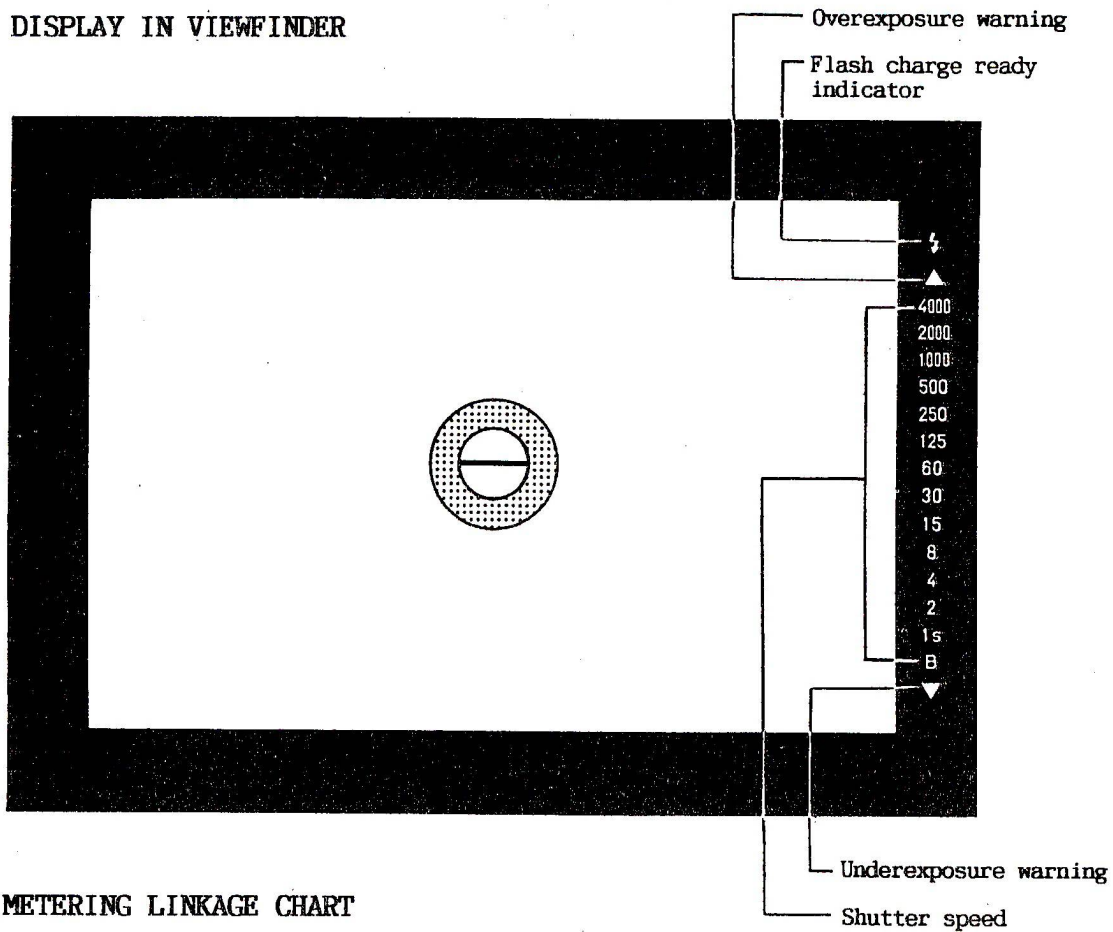
Depth-of-Field : Preview button

Dimensions and Weight : 134.5 (W) × 89 (H) × 51 (D) mm (5-5/16 × 3-1/2 × 2 inches), approx. 565g (20 oz.) (w/o batteries)

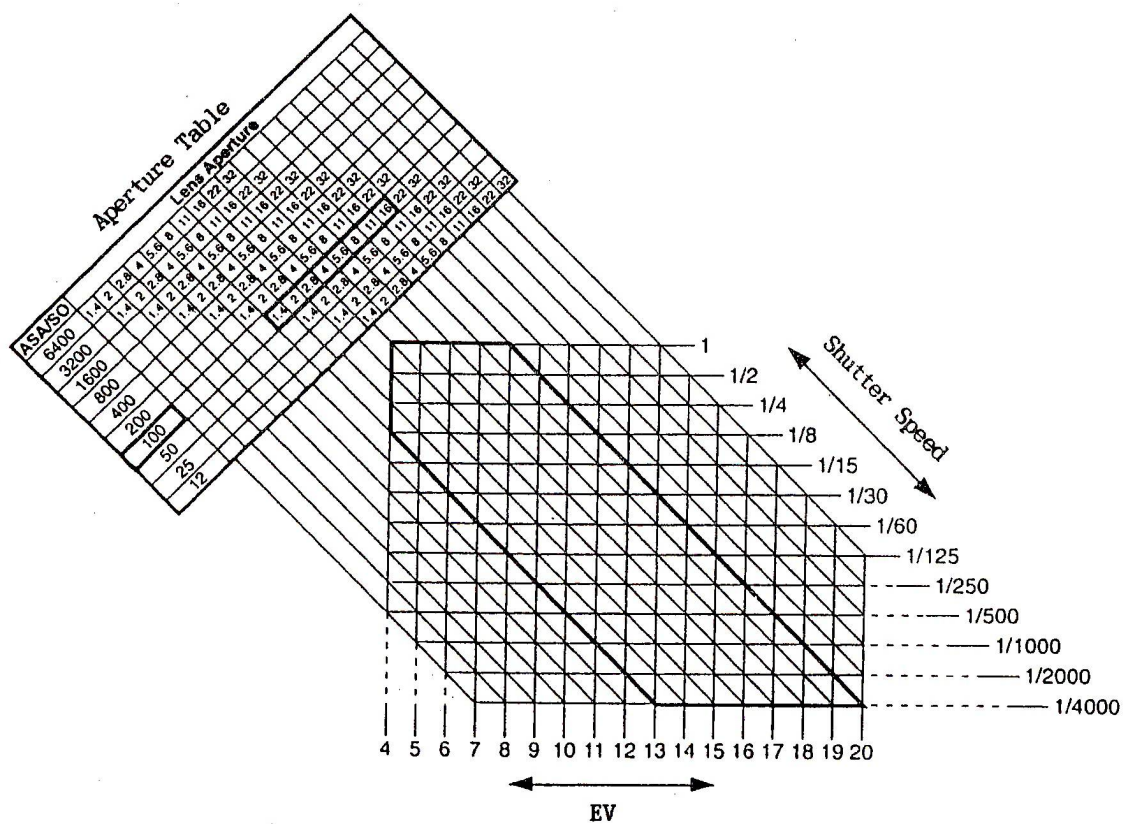
\* Specifications and design are subject to change without notice.



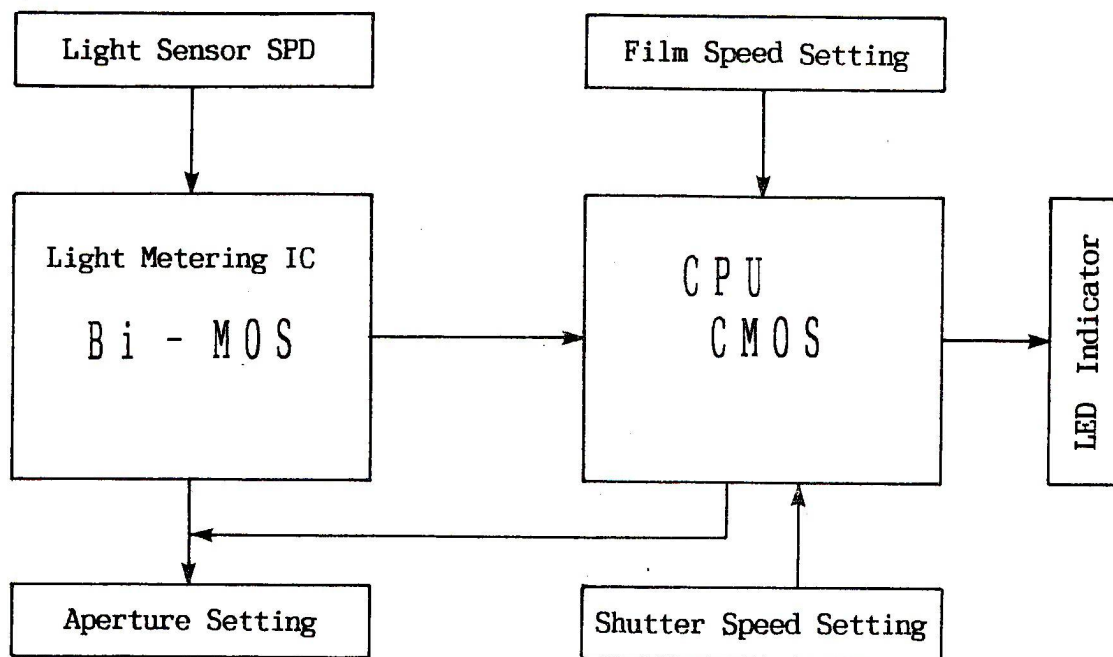
# DISPLAY IN VIEWFINDER



## METERING LINKAGE CHART

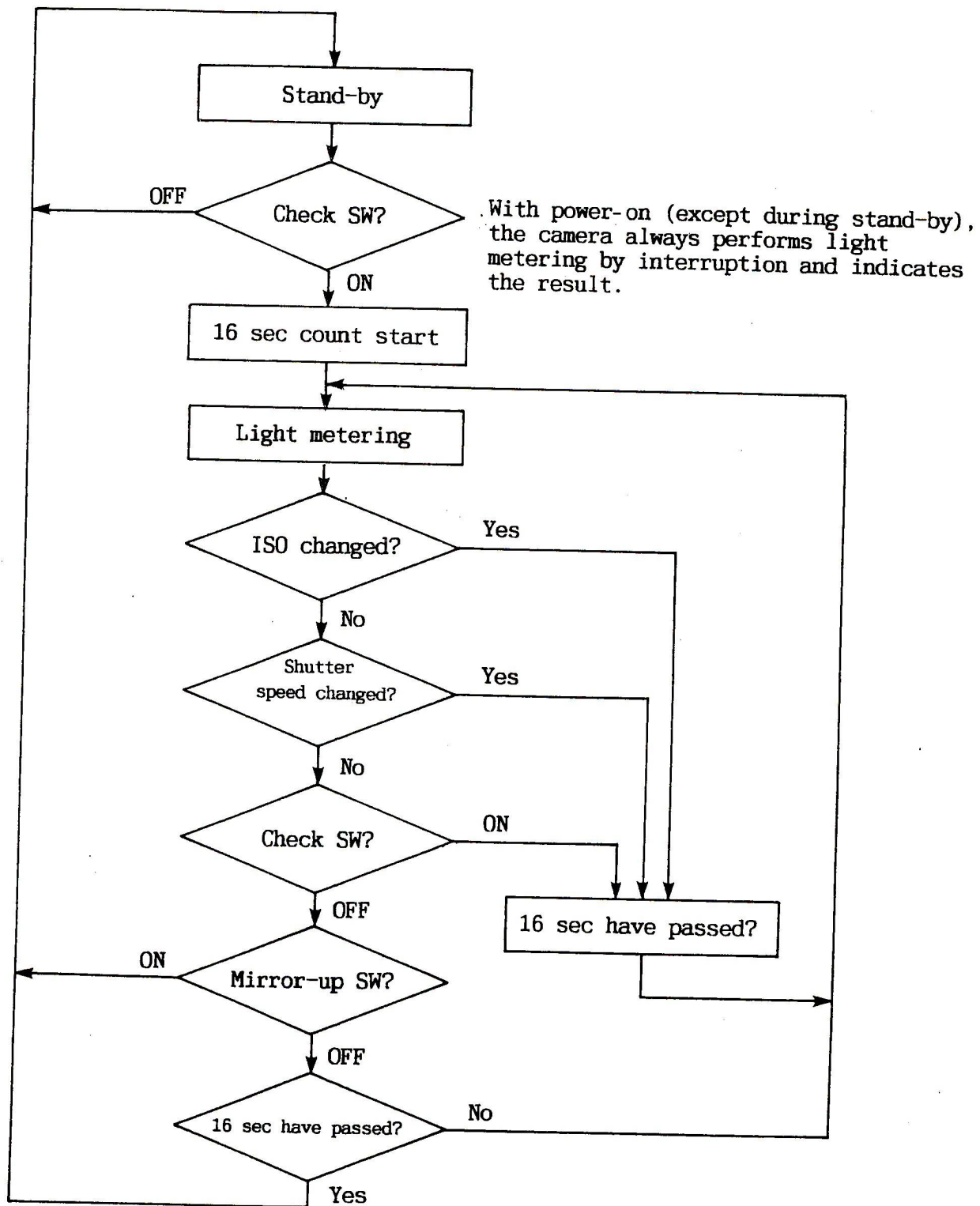


# CIRCUIT BLOCK DIAGRAM





# SEQUENCE FLOWCHART



## DESCRIPTION OF ELECTRIC CIRCUITRY

### Light Metering Circuit

#### 1. Outline

The photocurrent flowing in the SPD at the top of the eyepiece is dual slope integrated by the analog IC. The result of integration is operated by the CPU and indicated by the LEDs in the viewfinder.

#### 2. Functions

- ① The aperture data is input to the analog IC via the slide resistor. The CPU calculates an optimum shutter speed from the analog IC output and ISO code data. And the set value and optimum value of shutter speed are indicated by the LEDs in the viewfinder.
- ② The CPU operates the analog switch (IC4) and shuts off the input of aperture data to the analog IC. From the analog IC, the CPU receives the data proportional to exposure, which is independent of the aperture, and, according to the data, switches the brightness (2 levels) of the LED in the viewfinder.

#### 3. Operation

- ① PORT51 (4 pin) is turned to "Hi" to turn ON the analog switch (IC4).
- ② PORT52 (5 pin) is turned to "Lo" for 10 msec. (SP signal is output.)
- ③ The analog IC is charged according to the exposure of the SPD and the aperture value while the CLOCK. IN terminal (connected to PORT52) is turned to "Lo" (for 10 msec). And it starts discharge when the CLOCK. IN terminal turns "Hi". The COMP. OUT terminal is kept to "Lo" from the start of charge to the end of discharge.
- ④ The output from the COMP. OUT terminal is inverted by Q11 and is inputed to the PORTC2 (14 pin) and SIRQ (16 pin) terminals of the CPU.
- ⑤ From this pulse width and ISO data (input through PORT40 to 43, PORTC0), the CPU calculates an optimum shutter speed.
- ⑥ PORT51 (4 pin) is turned to "Lo" to turn OFF the analog switch (IC4).
- ⑦ Like ②, PORT52 (5 pin) is turned to "Lo" for 10 msec. (SP signal is output.)
- ⑧ The analog IC is charged according to the exposure of the SPD (independent of aperture value) while the CLOCK. IN terminal (connected to PORT52) is turned to "Lo" (for 10 msec). And it starts discharging when the CLOCK. IN terminal turns "Hi". The COMP. OUT terminal is kept to "Lo" from the start of charge to the end of discharge.
- ⑨ Like ④, the output from the COMP. OUT terminal is inverted by Q11 and is inputed to the PORTC2 (14 pin) and SIRQ (16 pin) terminals of the CPU.
- ⑩ From this pulse width, the CPU calculates the brightness of the subject.



- ⑪ The CPU receives the set value of shutter speed through PORT30 to 33 (38,40, 41 and 42 pins) and outputs the set value and optimum value of shutter speed to the LEDs in the viewfinder by driving Q21 to 25 through PORT00 to 21 (26 to 35 pins).
- ⑫ When the brightness of the subject calculated at ⑩ is LV8 or below, "Hi" is outputted from PORT50 (3 pin) and Q28 is turned ON to lower the brightness of the LED. When the brightness of the subject is LV9 or above, "Lo" is outputted from PORT50 (3 pin) and Q28 is turned ON to raise the brightness of the LED. When it is between LV8 and LV9, the brightness of the LED is kept as before.

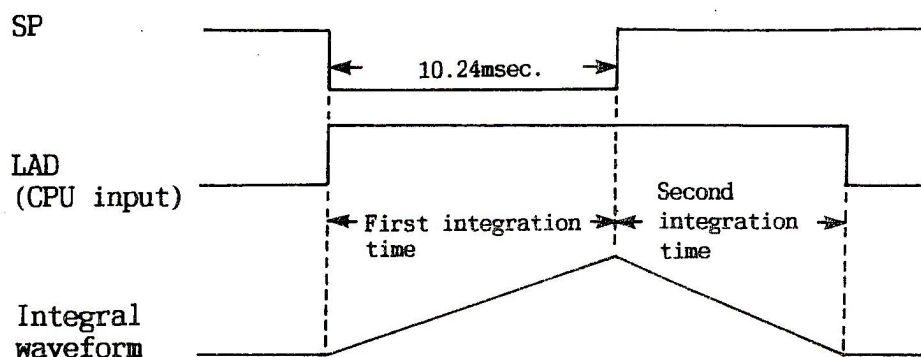


Table 1 Relationship between integration time and shutter time at ISO100

| 2nd integration time (msec.) | Shutter speed indication | 2nd integration time (msec.) | Shutter speed indication |
|------------------------------|--------------------------|------------------------------|--------------------------|
| 0 ~ 0.128                    | ▲                        | 6.528 ~ 6.656                | 30 · 60                  |
| 0.128 ~ 0.256                | ▲                        | 6.656 ~ 6.784                | 30 · 60                  |
| 0.256 ~ 0.384                | ▲                        | 6.784 ~ 6.912                | 30 · 60                  |
| 0.384 ~ 0.512                | ▲                        | 6.912 ~ 7.040                | 30                       |
| 0.512 ~ 0.640                | ▲                        | 7.040 ~ 7.168                | 30                       |
| ...                          | ...                      | 7.168 ~ 7.296                | 15 · 30                  |
| 2.176 ~ 2.304                | ▲                        | 7.296 ~ 7.424                | 15 · 30                  |
| 2.304 ~ 2.432                | ▲                        | 7.424 ~ 7.552                | 15 · 30                  |
| 2.432 ~ 2.560                | 4000                     | 7.552 ~ 7.680                | 15                       |
| 2.560 ~ 2.688                | 4000                     | 7.680 ~ 7.808                | 15                       |
| 2.688 ~ 2.816                | 2000 · 4000              | 7.808 ~ 7.936                | 8 · 15                   |
| 2.816 ~ 2.944                | 2000 · 4000              | 7.936 ~ 8.064                | 8 · 15                   |
| 2.944 ~ 3.072                | 2000 · 4000              | 8.064 ~ 8.192                | 8 · 15                   |
| 3.072 ~ 3.200                | 2000                     | 8.192 ~ 8.320                | 8                        |
| 3.200 ~ 3.328                | 2000                     | 8.320 ~ 8.448                | 8                        |
| 3.328 ~ 3.456                | 1000 · 2000              | 8.448 ~ 8.576                | 4 · 8                    |
| ...                          | ...                      | ...                          | ...                      |
| 4.224 ~ 4.352                | 500 · 1000               | 9.216 ~ 9.344                | 2 · 4                    |
| 4.352 ~ 4.480                | 500                      | 9.344 ~ 9.472                | 2 · 4                    |
| 4.480 ~ 4.608                | 500                      | 9.472 ~ 9.600                | 2                        |
| 4.608 ~ 4.736                | 250 · 500                | 9.600 ~ 9.728                | 2                        |
| 4.736 ~ 4.864                | 250 · 500                | 9.728 ~ 9.856                | 1 · 2                    |
| 4.864 ~ 4.992                | 250 · 500                | 9.856 ~ 9.984                | 1 · 2                    |
| 4.992 ~ 5.120                | 250 · 500                | 9.984 ~ 10.112               | 1 · 2                    |
| 5.120 ~ 5.248                | 250                      | 10.112 ~ 10.240              | 1                        |
| 5.248 ~ 5.376                | 250                      | 10.240 ~ 10.368              | 1                        |
| 5.376 ~ 5.504                | 125 · 250                | 10.368 ~ 10.496              | ▼                        |
| 5.504 ~ 5.632                | 125 · 250                | 10.496 ~ 10.624              | ▼                        |
| 5.632 ~ 5.760                | 125                      | 10.624 ~ 10.752              | ▼                        |
| 5.760 ~ 5.888                | 125                      | ...                          | ...                      |
| 5.888 ~ 6.016                | 60 · 125                 | 19.840 ~ 19.968              | ▼                        |
| 6.016 ~ 6.144                | 60 · 125                 | 19.968 ~ 20.096              | ▼                        |
| 6.144 ~ 6.272                | 60 · 125                 | 20.096 ~ 20.224              | ▼                        |
| 6.272 ~ 6.400                | 60                       | 20.224 ~ 20.352              | ▼                        |
| 6.400 ~ 6.528                | 60                       | 20.352 ~ 20.480              | ▼                        |

## BC Circuit

### 1. Outline

The analog IC detects B1 level (2.5V) and gives a warning indication. At 2.4V or below, the reset IC stops all functions of the camera.

### 2. Functions

- ① The indications of light metering value and set value blink in the viewfinder at 1 Hz when the power voltage comes to 2.5V or below.
- ② All the functions of the camera stop when the power voltage drops to 2.4V or below.

### 3. Operation

- ① At power ON by turning ON the check switch, PORT00 (26 pin) and PORT02 (28 pin) are turned to "Hi" at the same time for 4 msec.
- ② Q12 turns ON and current flows through R25.
- ③ The power voltage is divided by R01, R02 and VR5, and is inputed to the VJB terminal (22 pin) of the analog IC and compared with the reference voltage (Vs) inside the IC. And the "Hi" signal is outputed from the BATT terminal (23 pin) when the power voltage comes to 2.5V or below.
- ④ The BATT terminal is connected to PORT23 (37 pin) of the CPU. When the input to this port turns "Hi", the CPU blinks the indication in the viewfinder at 1 Hz.
- ⑤ When the power voltage drops to 2.4V or below, the output from the reset IC (IC3) turns "Lo". Then the  $\overline{RST}$  terminal (24 pin) turns "Lo" and the CPU stops all the functions of the camera.



## Power-Hold

### 1. Outline

The power is automatically turned off if 16 seconds pass without any change of ISO setting or shutter speed setting with the check switch in OFF position. Even before the 16 seconds pass, the power will be turned OFF immediately if the shutter is released or preview operation is made.

### 2. Functions

- ① Holds the power for 16 seconds, as a rule.
- ② Maintains the power hold when the check switch is kept ON.
- ③ Holds the power for 16 seconds after turning ON and then OFF the check switch.
- ④ Holds the power for 16 seconds after change of ISO setting or shutter speed setting.
- ⑤ Turns the power OFF immediately after the shutter release or the preview operation.
- ⑥ Turns the power ON only by turning ON the check switch.

### 3. Operation

- ① When 16 seconds have passed without any change of the ISO or shutter dial setting with the check switch turned OFF (with PORTB0 (8 pin) turned "Hi"), "Lo" is outputted from PORT53 (7 pin), the power to the analog IC is turned OFF and the CPU comes to STOP status. (At the same time, the oscillator stops oscillating.)
- ② Counting of 16 seconds is not performed when the check switch is ON.
- ③ Counting is started when the check switch is turned ON and then OFF.
- ④ After detection of change of ISO setting (PORT40 to 43, C0) or shutter speed setting (PORT30 to 33), counting of 16 seconds is started from the beginning.
- ⑤ When the mirror-up switch (PORTC3) is turned ON with the check switch in ON position, the camera does not come to STOP till the detection of the turning-OFF of both switches. However, these two switches are connected with a diode so that the mirror-up switch is not turned ON singly. (This state occurs at shutter release or preview operation.)
- ⑥ Once the power is turned OFF, it is not turned ON until a rise edge is inputted to PORTB0 to B3. (Check switch only)

## DESCRIPTION OF SWITCHES

### 1. Check Switch

Location of switch: Under the shutter release

Condition of switch ON:

The check switch is turned ON when the shutter release is pressed halfway down.

Functions of switch:

- ① Power is turned ON by turning ON the check switch.
- ② Power-hold is maintained by turning ON the check switch.
- ③ When the check switch and the mirror-up switch are turned ON at the same time, the power is turned OFF after the detection of the turning-OFF both switches.

### 2. Mirror-up Switch

Location of switch: In the lower part of the mirror box

Condition of switch ON:

The mirror-up switch is turned to ON in interlock with the aperture stop-down mechanism.

Functions of switch:

After the mirror-up switch is turned to ON and then OFF, the power is turned to OFF at the turning-OFF of the check switch.

# DESCRIPTION OF IC TERMINALS

## IC1 (CPU)

| Pin No. | Terminal Name            | I/O | Symbol                  | Description of Terminal                                  |
|---------|--------------------------|-----|-------------------------|--|
| 01      | PORT42                   | IN  | ISO2                    | ISO code input terminal 2                                |
| 02      | PORT43                   | IN  | ISO3                    | ISO code input terminal 3                                |
| 03      | PORT50                   | OUT | KID0                    | LED brightness switching output                          |
| 04      | PORT51                   | OUT | A.SW                    | Analog switch control output                             |
| 05      | PORT52                   | OUT | SP                      | SP signal output   |
| 06      | NC                       |     |                         | NC   |
| 07      | PORT53                   | OUT | Vcc.CONT                | Vcc control output                                       |
| 08      | PORTB0                   | IN  | CHECK.SW                | Check switch input                                       |
| 09      | PORTB1                   | IN  | A.CHECK1                | Amplifier check input 1                                  |
| 10      | PORTB2                   | IN  | A.CHECK2                | Amplifier check input 2                                  |
| 11      | PORTB3                   |     |                         | NC   |
| 12      | PORTC0                   | IN  | ISO4                    | ISO code input terminal 4                                |
| 13      | PORTC1                   |     |                         | NC   |
| 14      | PORTC2                   | IN  | LAD                     | LAD signal input (same as $\overline{\text{SIRQ}}$ )     |
| 15      | PORTC3                   | IN  | M.UP.SW                 | Mirror-up switch input                                   |
| 16      | $\overline{\text{SIRQ}}$ | IN  | LAD                     | LAD signal input (same as PORTC2)                        |
| 17      | $\overline{\text{IRQ}}$  |     |                         | NC   |
| 18      | Vss                      |     | GND                     | GND  |
| 19      | OSC1                     |     | OSC1                    | Ceramic oscillator (2 MHz) input terminal 1              |
| 20      | OSC2                     |     | OSC2                    | Ceramic oscillator (2 MHz) input terminal 2              |
| 21      | VDD                      |     | VBAT                    | VBAT   |
| 22      | XI                       |     |                         | NC   |
| 23      | XO                       |     |                         | NC   |
| 24      | $\overline{\text{RST}}$  | IN  | $\overline{\text{RST}}$ | Reset input (connected to 2.4V reset IC output terminal) |

# IC1 (CPU)

| Pin No. | Terminal Name | I/O | Symbol   | Description of Terminal       |                               |  |
|---------|---------------|-----|----------|-------------------------------|-------------------------------|--|
| 25      | SYNC          |     |          | NC                            |                               |  |
| 26      | PORT00        | OUT | COM0     | ▲                             | 30                            | Indication by LEDs in viewfinder<br><br>1/8 duty |
| 27      | PORT01        | OUT | COM1     | 4000                          | 15                            |  |
| 28      | PORT02        | OUT | COM2     | 2000                          | 8                             |  |
| 29      | PORT03        | OUT | COM3     | 1000                          | 4                             |  |
| 30      | PORT10        | OUT | COM4     | 500                           | 2                             |  |
| 31      | PORT11        | OUT | COM5     | 250                           | 1                             |  |
| 32      | PORT12        | OUT | COM6     | 125                           | B                             |  |
| 33      | PORT13        | OUT | COM7     | 60                            | ▼                             |  |
| 34      | PORT20        | OUT | SEG0     | ▲                             | 4000 2000 1000 500 250 125 60 |  |
| 35      | PORT21        | OUT | SEG1     | 30                            | 15 8 4 2 1 B                  | ▼  |
| 36      | PORT22        |     |          | NC                            |                               |  |
| 37      | PORT23        | IN  | B1       | B1 warning signal input       |                               |  |
| 38      | PORT30        | IN  | SHUTTER0 | Shutter code input terminal 0 |                               |  |
| 39      | NC            |     |          | NC                            |                               |  |
| 40      | PORT31        | IN  | SHUTTER1 | Shutter code input terminal 1 |                               |  |
| 41      | PORT32        | IN  | SHUTTER2 | Shutter code inout terminal 2 |                               |  |
| 42      | PORT33        | IN  | SHUTTER3 | Shutter code input terminal 3 |                               |  |
| 43      | PORT40        | IN  | ISO0     | ISO code input terminal 0     |                               |  |
| 44      | PORT41        | IN  | ISO1     | ISO code input terminal 1     |                               |  |



# IC2 (Analog IC)

| Pin No. | Terminal Name | I/O | Symbol | Description of Terminal   |
|---------|---------------|-----|--------|---|
| 01      | Ph1           |     |        | SPD cathode (same as 3 pin)   |
| 02      | Ph2           |     |        | SPD anode   |
| 03      | Ph1           |     |        | SPD cathode (same as 1 pin)   |
| 04      | Phc           |     |        | Capacitor connection between this and Ph1                                   |
| 05      | OFFSET1       |     |        | Offset adjusting terminal 1 of light metering amplifier                     |
| 06      | OFFSET2       |     |        | Offset adjusting terminal 2 of light metering amplifier                     |
| 07      | Jr            |     | Jr     | Vr adjusting feedback terminal  |
| 08      | Vr            |     | Vr     | Reference voltage in IC ( $V_s + 288\text{mV}$ ) adjusted by VR2            |
| 09      | Vs            |     | Vs     | Reference voltage in IC ( $V_{cc} - 1.4\text{V}$ )                          |
| 10      | NC            |     |        | NC  |
| 11      | NC            |     |        | NC  |
| 12      | NC            |     |        | NC  |
| 13      | NC            |     |        | NC  |
| 14      | NC            |     |        | NC  |
| 15      | VF            |     | VF     | Aperture data input terminal (input from aperture board)                    |
| 16      | VA            |     | VA     | ISO data input terminal (input fixed by R04 and R05)                        |
| 17      | VJ            |     | VJ     | Exposure (inclination) adjusting input terminal                             |
| 18      | Vcc           |     | Vcc    | Vcc   |
| 19      | REF.IN        |     |        | NC  |
| 20      | NC            |     |        | NC  |
| 21      | REF.OUT       |     |        | NC  |
| 22      | VJB           |     |        | Comparator input for B1 level detection (Resistance-divided input to V BAT) |
| 23      | BATT          |     |        | Output terminal for B1 level detection                                      |

# IC2 (Analog IC)

| Pin No. | Terminal Name           | I/O | Symbol | Description of Terminal   |
|---------|-------------------------|-----|--------|---|
| 24      | SUP                     |     |        | Capacitor and resistor connecting terminal for speed-up circuit |
| 25      | COMP.OUT                |     |        | LAD signal output terminal                                      |
| 26      | CLOCK.IN                |     |        | SP signal input terminal  |
| 27      | RF                      |     |        | Integration clamp resistor connection                           |
| 28      | INT.IN                  |     |        | Terminal for connecting integration resistor and capacitor      |
| 29      | BUF.OUT                 |     |        | Buffer output   |
| 30      | INT.OUT                 |     |        | Integration output  |
| 31      | $\overline{\text{SUP}}$ |     |        | Capacitor and resistor connecting terminal for speed-up circuit |
| 32      | GND                     |     | GND    | GND   |

# DESCRIPTION OF ELECTRIC PARTS

| Symbol | Name                       | Function  |
|--------|----------------------------|---|
| IC1    | CPU                        | Light metering calculation<br>Indication<br>Battery check                                   |
| IC2    | Analog IC                  | Light metering<br>Battery check   |
| IC3    | Reset IC                   | CPU hard reset  |
| IC4    | Analog switch              | Switch between normal light metering (incl. aperture data) and subject brightness measuring |
| Q11    | NPN digi. tra.             | LAD signal inversion  |
| Q12    | PNP digi. tra.             | Battery check dummy load ON-OFF   |
| Q21    | PNP digi. tra. x 2         | LED drive (SEG. side)   |
| Q22    | NPN digi. tra. x 2         | LED drive (COM. side)   |
| Q23    | NPN digi. tra. x 2         | LED drive (COM. side)   |
| Q24    | NPN digi. tra. x 2         | LED drive (COM. side)   |
| Q25    | NPN digi. tra. x 2         | LED drive (COM. side)   |
| Q26    | NPN, PNPT <sub>r</sub> + R | Vcc ON - OFF  |
| Q27    | NPN digi. tra. x 2         | Drive of flash charge ready LED   |
| Q28    | PNP digi. tra. x 2         | LED brightness switching resistor ON-OFF  |
| VR1    | Semifixed resistor         | Offset adjustment   |
| VR2    | Semifixed resistor         | V <sub>r</sub> adjustment   |
| VR3    | Semifixed resistor         | Resistance adjustment for aperture stop-down  |
| VR4    | Semifixed resistor         | Exposure (inclination) adjustment   |
| VR5    | Semifixed resistor         | B1 level adjustment   |
| R01    | Resistor 30K               | B1 level adjusting resistance   |
| R02    | Resistor 7.5K              | B1 level adjusting resistance   |
| R03    | Resistor 30K               | V <sub>r</sub> adjusting resistance   |
| R04    | Resistor 30K               | ISO dividing resistance (dummy)   |
| R05    | Resistor 18K               | ISO dividing resistance (dummy)   |

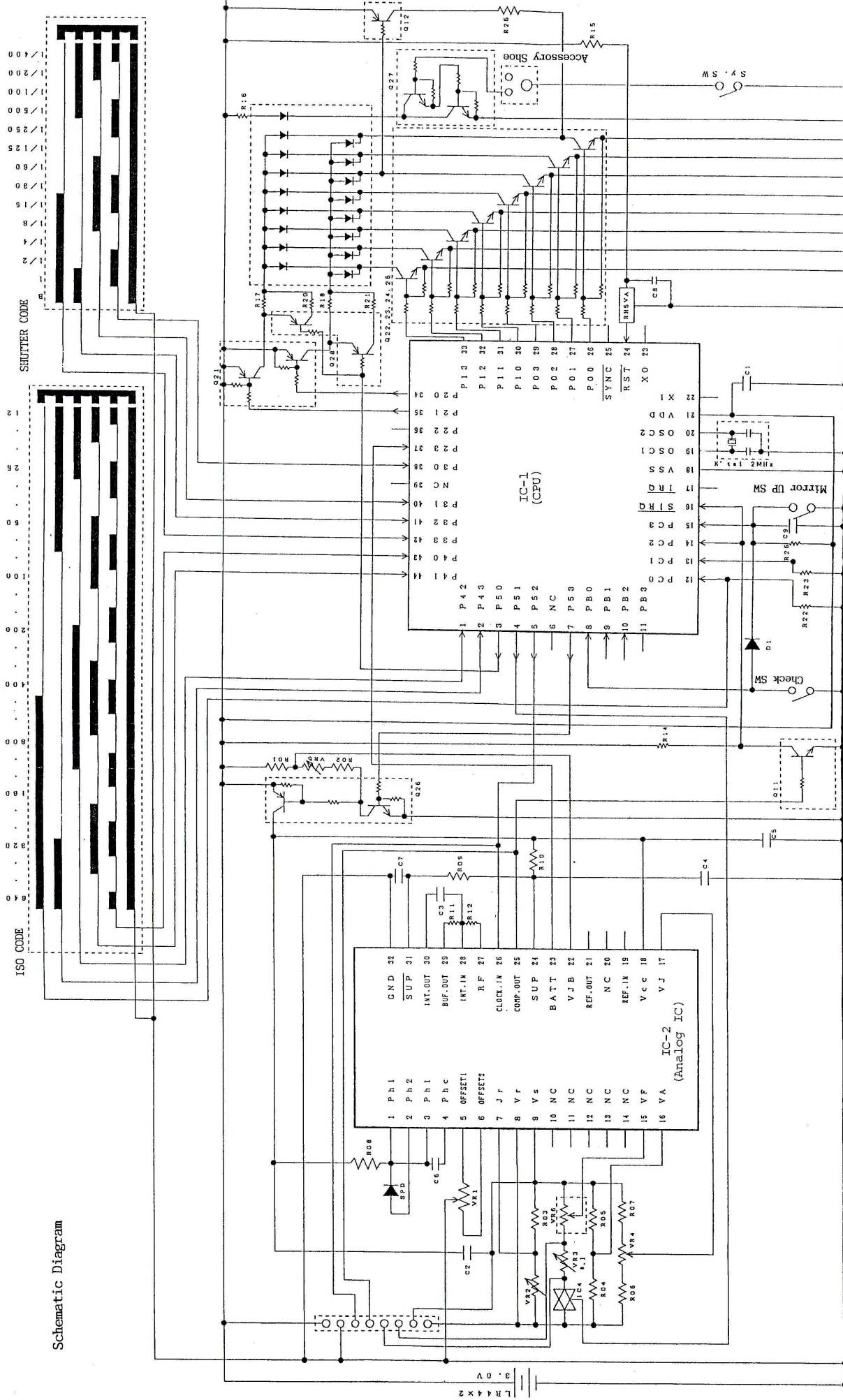


| Symbol | Name                          | Function  |
|--------|-------------------------------|---|
| R06    | Resistor 22K                  | Exposure adjusting resistance                             |
| R07    | Resistor 7.5K                 | Exposure adjusting resistance                             |
| R08    | Resistor 300K                 | Output stabilizing resistance                             |
| R09    | Resistor 510K                 | Starting speed-up circuit for light metering              |
| R10    | Resistor 220K                 | Starting speed-up circuit for light metering              |
| R11    | Resistor 100K                 | Integration resistance                                    |
| R12    | Resistor 100K                 | Integration clamp resistance                              |
| R13    | Missing No.                   |   |
| R14    | Resistor 100K                 | Pull-up resistance for LAD inversion                      |
| R15    | Resistor 3.3K                 | Input smoothing resistance for reset IC                   |
| R16    | Resistor 300                  | Current limiting resistance for flash charge ready LED    |
| R17    | Resistor 750                  | Current limiting resistance for shutter speed LED         |
| R18    | Resistor 750                  | Current limiting resistance for shutter speed LED         |
| R19    | Missing No.                   |   |
| R20    | Resistor 300                  | Current limiting resistance for LED brightness adjustment |
| R21    | Resistor 300                  | Current limiting resistance for LED brightness adjustment |
| R22    | Resistor 1M                   | PORTC0 pull-down resistance                               |
| R23    | Resistor 1M                   | PORTC1 pull-down resistance                               |
| R24    | Missing No.                   |   |
| R25    | Resistor 200                  | B1 check dummy load                                       |
| R26    | Resistor 510K                 | Current limiting resistance for release switch delay      |
| C1     | Tantalum capacitor 10 $\mu$   | CPU power (V BAT) smoothing capacitor                     |
| C2     | Ceramic capacitor 0.1 $\mu$   | Vs level smoothing capacitor                              |
| C3     | Ceramic capacitor 0.1 $\mu$   | Integration capacitor                                     |
| C4     | Ceramic capacitor 0.015 $\mu$ | Starting speed-up circuit for light metering              |



| Symbol | Name                          | Function  |
|--------|-------------------------------|---|
| C5     | Tantalum capacitor 1 $\mu$    | Analog IC power (Vcc) smoothing capacitor                             |
| C6     | Ceramic capacitor 30P         | SPD stabilizing capacitor   |
| C7     | Ceramic capacitor 0.047 $\mu$ | Starting speed-up circuit for light metering                          |
| C8     | Ceramic capacitor 0.047 $\mu$ | Input voltage smoothing capacitor for reset IC                        |
| C9     | Tantalum capacitor 1 $\mu$    | Release switch delay circuit  |
| D1     | Diode                         | Check switch ON by release ON   |
| SPD    | SPD                           | Light metering SPD  |
| X'tal  | Ceramic oscillator            | Generation of CPU main clock (FB resistor and capacitor incorporated) |

Schematic Diagram



## B. DISASSEMBLY & REASSEMBLY PROCEDURE

## Removal of Exterior Parts

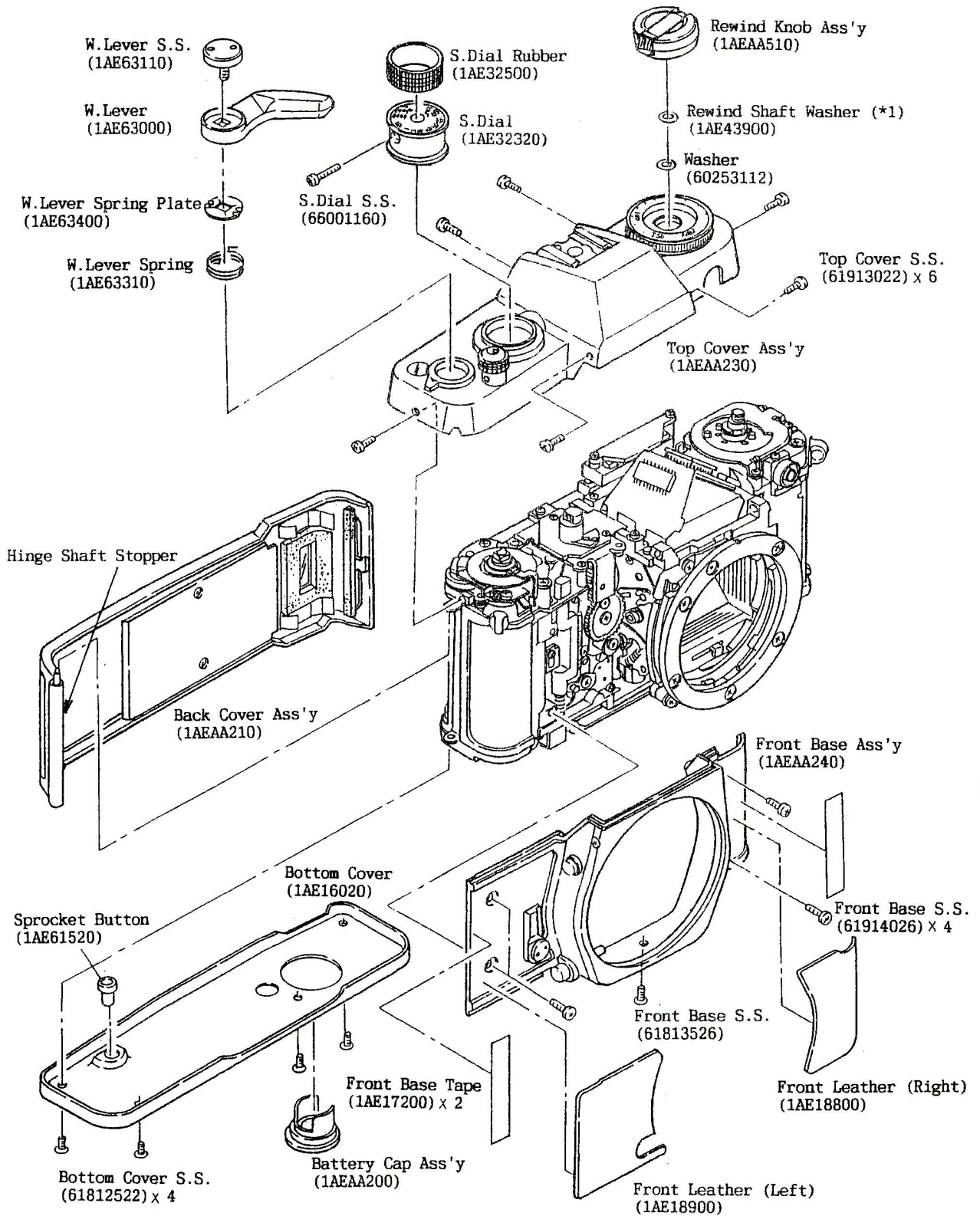


Fig.1



## B-1 REMOVAL OF EXTERIOR PARTS

### B-1-1 Removal of Back Cover Ass'y

- 1) Open the Back Cover Ass'y (1AEAA210) by pulling up the Rewind knob Ass'y. Remove the Back Cover Ass'y while pressing down the Hinge Shaft Stopper.

### B-1-2 Removal of Bottom Cover

- 1) Remove the Battery Cap Ass'y (1AEAA200).
- 2) Remove the Bottom Cover Setscrews (61812522) x 4.
- 3) Remove the Bottom Cover (1AE16020) and Sproket Button (1AE61520).

### B-1-3 Removal of Top Cover Ass'y

- 1) Remove the W. Lever Setscrew (1AE63110).

#### Notes:

- a) The W. Lever Setscrew is a reverse screw.
  - b) Since the W. Lever Setscrew is locked with Loctite, take due care when removing it.
- 2) Remove the W. Lever (1AE63000), W. Lever Spring Plate (1AE63400) and W. Lever Spring (1AE63310).
  - 3) Position the "60" on the S. Dial (1AE32320) at the Shutter Speed Index on the Top Cover.
  - 4) Remove the S. Dial Rubber (1AE32500) and then the S. Dial Setscrew (66001160).  
Remove the S. Dial (1AE32320).
  - 5) Remove the Rewind Knob Ass'y (1AEAA510) and Washer (60353112).

#### Note:

- a) The Rewind Shaft Washer (1AE43900) (Polyslider t: 0.25), marked with \*1, is used to correct the idling torque of the Rewind knob, when it is too low.
- 6) Remove the Top Cover Setscrews (61913022) x 6.
  - 7) Unsolder (see Fig.2) the green, orange and black lead wires coming from the Hot Shoe while holding up the Top Cover Ass'y (1AEAA230) and then remove the Top Cover Ass'y.

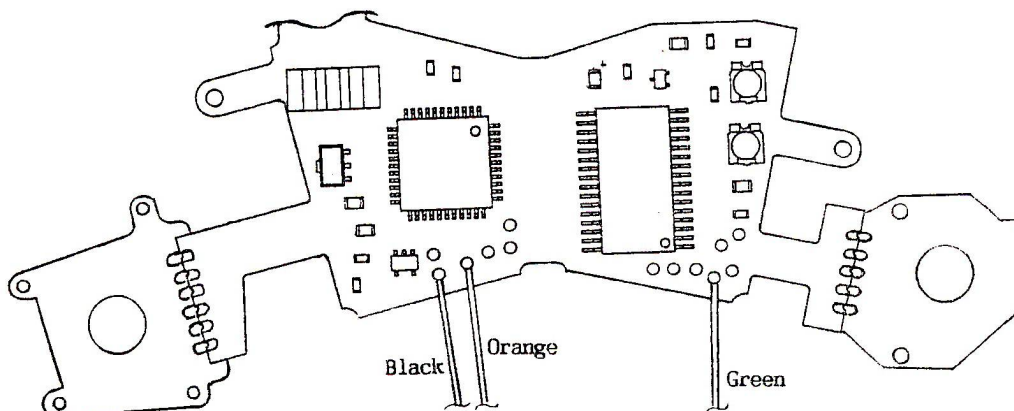


Fig. 2

[Notes on Reassembly of Top Cover Ass'y]

- a) Fit the cut portion of the ME Lever (15966310) on the ME Interlock Lever (1AE67800) when installing the Top Cover Ass'y.

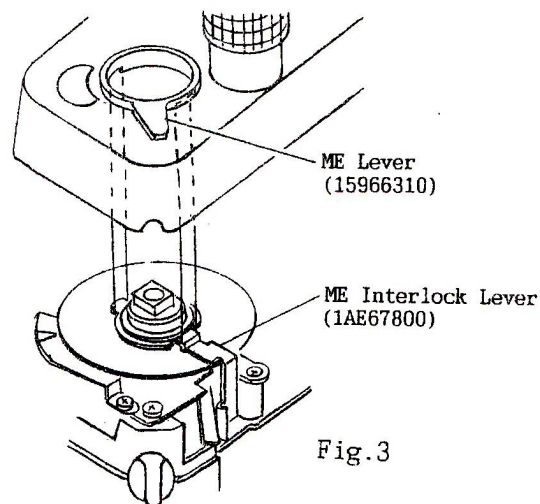


Fig. 3

- b) Position the pins of the ISO Contact Base Ass'y (1AEAA390) as shown in Fig. 3 (at ISO 100). When installing the Top Cover Ass'y, position the "100" of the ISO Dial at the ISO Index on the Top Cover.

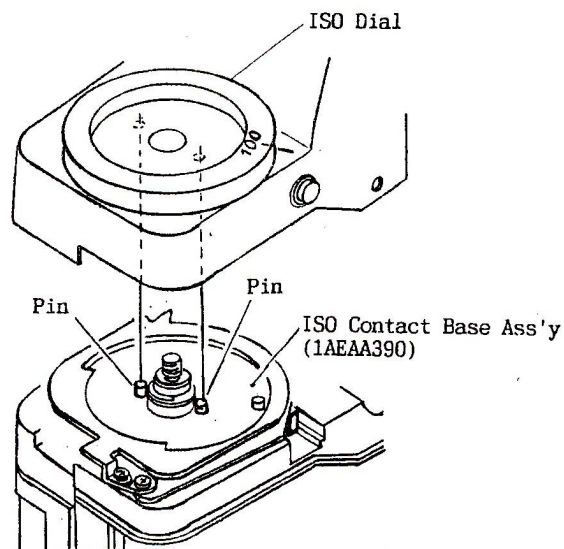


Fig. 4

#### B-1-5 Removal of Front Base Ass'y

- 1) Peel off the Leather (Right) (1AE18810).
- 2) Peel off the Leather (Left) (1AE18910).

##### Notes:

- a) The Leather (left) may be removed without removing the Selftimer Lever.
  - b) Use the Front Base Tapes (1AE17200) x 2 to correct the misalignment of the leather surfaces between the Front Base and the Body.
- 3) Remove the Front Base Setscrews (61813526) and (61914026) x 4 and take off the Front Base Ass'y (1AEAA240).

#### [Notes on Attaching of Leather]

The back of each Leather has been coated with adhesives. Before attaching the Leather (Left), Leather (Right) and Back Cover Leather, however, apply a thin film of bond (Ever Grip) to the specified edges of the adhesion surfaces of the Leathers.

Otherwise, the Leathers can easily come off.

\* Apply bond on the back surfaces of the following hatched areas:

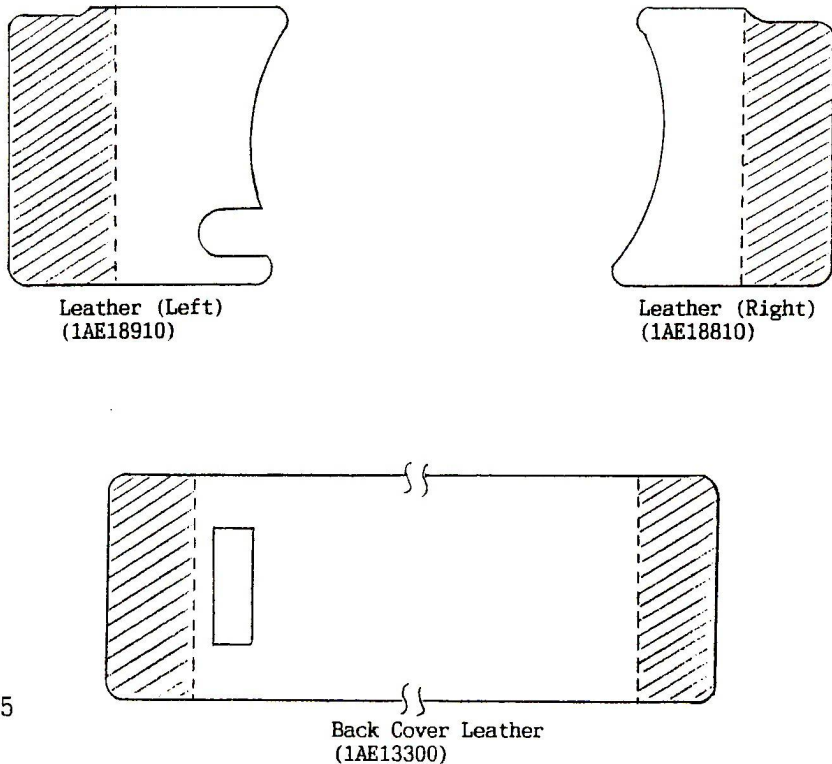


Fig.5

## Removal of Main FPC Ass'y

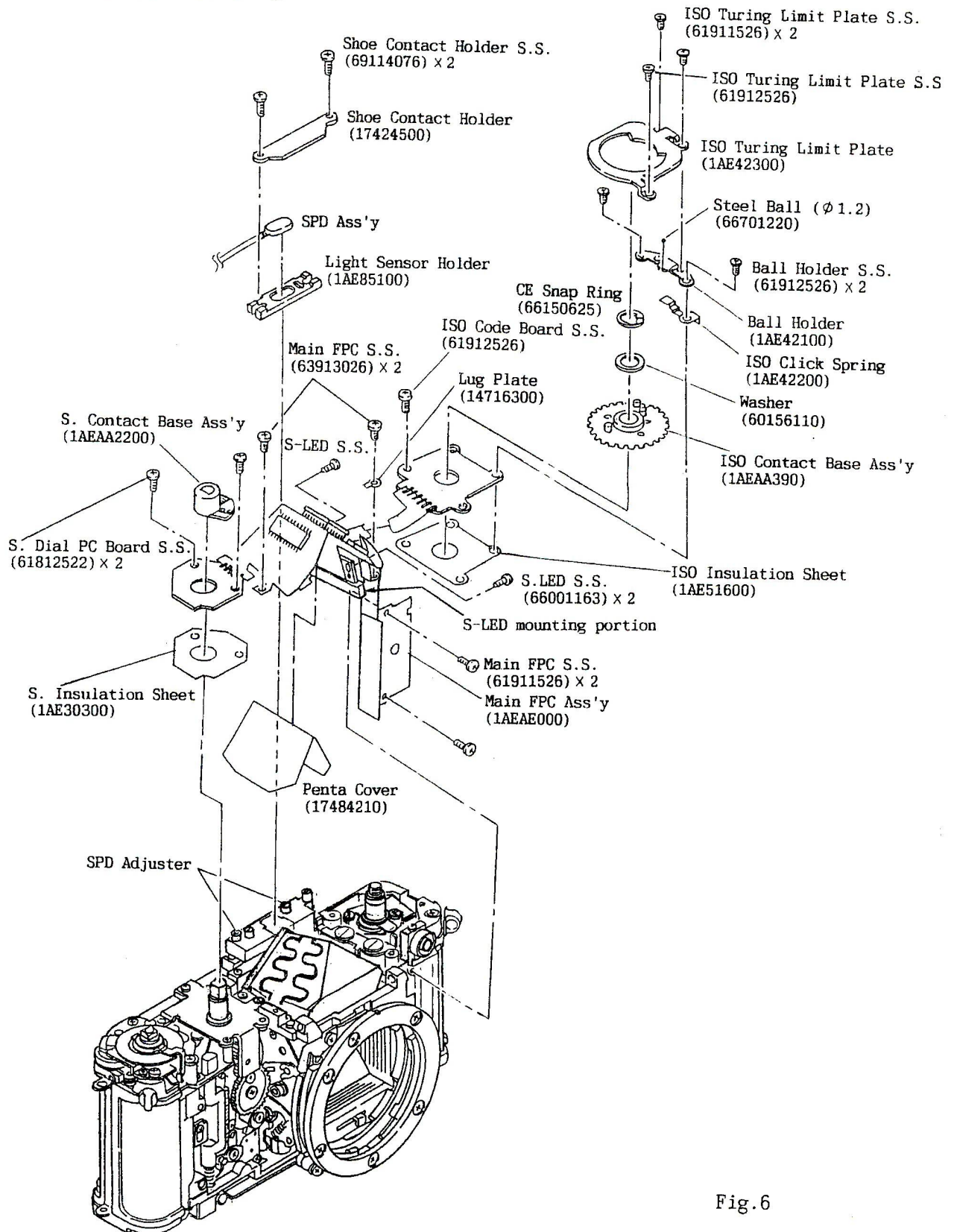


Fig.6



## B-2 REMOVAL OF MAIN FPC ASS'Y

### B-2-1 Removal of S.Dial PC Board

- 1) Remove the S. Contact Base Ass'y (1AEAA220).

#### Note:

- a) Take care not to deform or damage the contact on the S. Contact Base.
- 2) Remove the S. Dial PC Board Setscrew (61812522) x2.
  - 3) Remove the S. Dial PC Board (1AE51500) and S. Insulation Sheet (1AE30300).

### B-2-2 Removal of ISO Code Board

- 1) Remove the ISO Turning Limit Plate Aetscrews (61911526) x2 and (61912526) and take off the ISO Turning Limit Plate (1AE42300).
- 2) Remove the CE Snap Ring (66150625) and take off the Washer (60156110) and ISO Contact Base Ass'y (1AEAA390).

#### Note:

- a) Take care not to deform or damage the contact on the ISO Contact Base.
- 3) Remove the Ball Holder Setscrews (61912526) x2 and take off the Ball Holder (1AE42100), ISO Click Spring (1AE42200) and Steel Ball (66701220) together.
  - 4) Remove the ISO Code Board Setscrews (61912526) and take off the ISO Code Board.

### B-2-3 Removal of Main FPC Ass'y

- 1) Unsolder the gray lead wire (coming from Synchro Socket).
- 2) Unsolder the green lead wire (coming from Shutter Unit).
- 3) Unsolder the brown and black lead wires (coming from Exposure Check Switch).
- 4) Unsolder the red and black lead wires (coming from Battery Box).
- 5) Unsolder the purple, yellow and blue lead wires (coming from AVR Ass'y)
- 6) Remove the Shoe Contact Holder Setscrews (69114076) x2 and take off the Shoe Contact Holder (17424500), SPD Ass'y (1AEAE200) and Light Sensor Holder (1AE85100).
- 7) Remove the Main FPC Setscrews (61912226) x2.
- 8) Remove the Main FPC Setscrews (63912520) x2 and take off the Lug Plate (14716300).

- 9) Remove the S-LED Setscrews (66001163)  $\times$  2.
- 10) Remove the Main FPC Ass'y (1AEAE000).

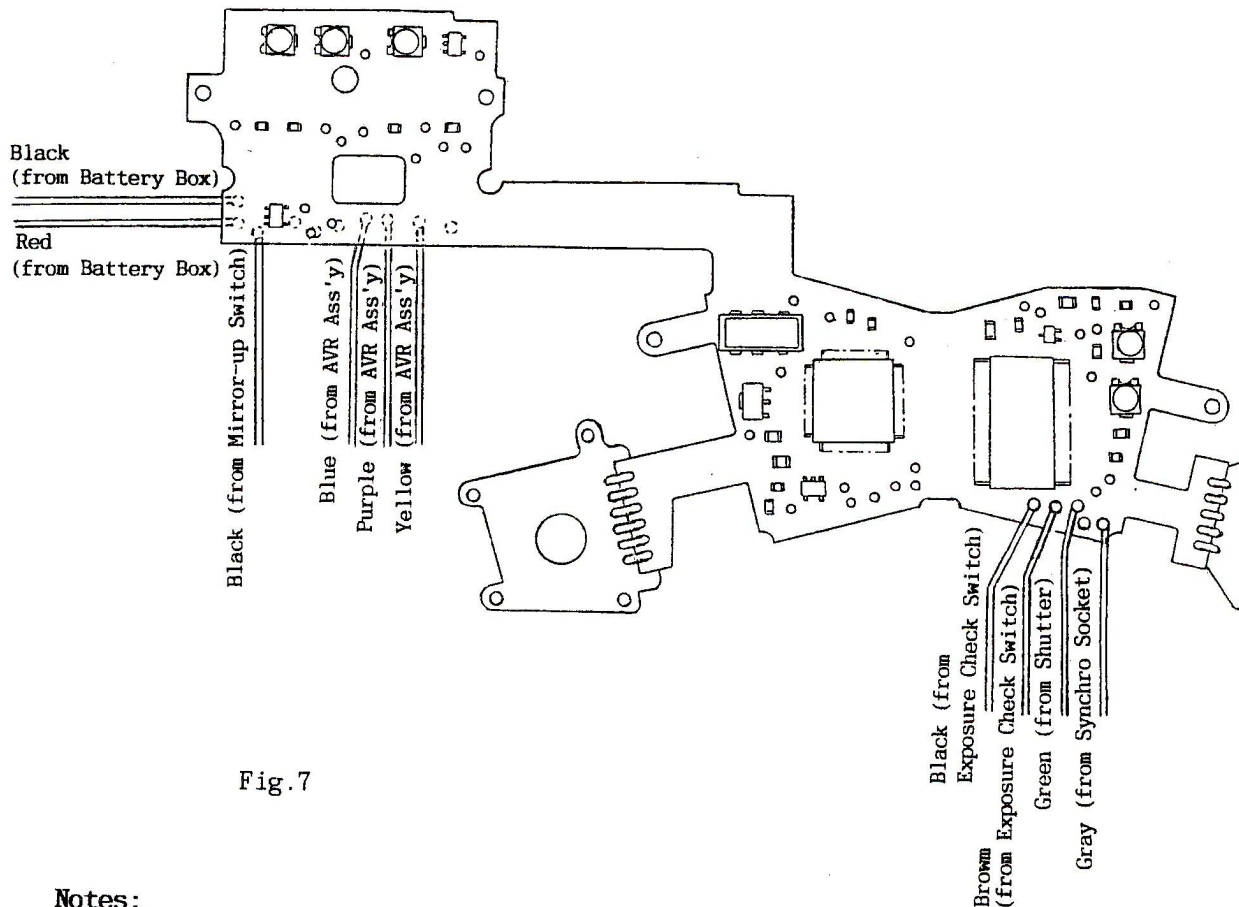


Fig.7

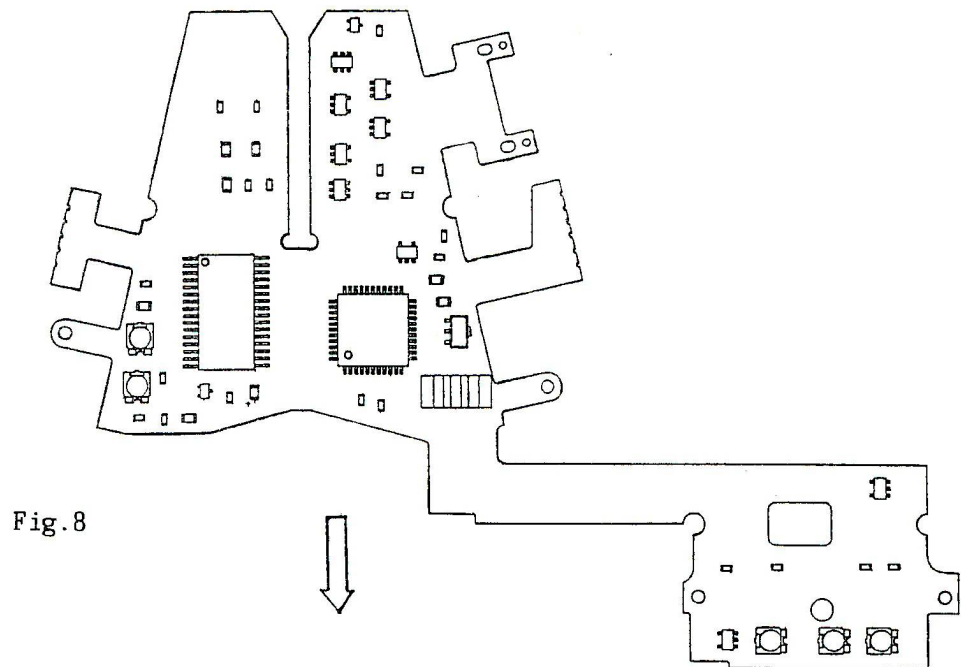
Notes:

- a) The Lug Plate (14716300) will be disused in the course of production. (See page B-10)
- b) When the S-LED Setscrews (66001163)  $\times$  2 have been removed and thus the S-LED mounting portion is moved, adjust the shutter speed indicator position in the viewfinder. (See page C-9)
- c) Do not turn either of the two SPD Adjusters (pins for adjusting spot metering position). If the SPD Adjusters have been turned, make the adjustment of spot metering position. (See page C-8)
- d) To remove the Main FPC Ass'y and Mirror Box Ass'y together, there is no need of removing the Main FPC Setscrews (63912520)  $\times$  2, S-LED Setscrews (66001163)  $\times$  2 and Shoe Contact Holder (17424500) or unsoldering the blue, yellow and brown lead wires coming from the AVR Ass'y.

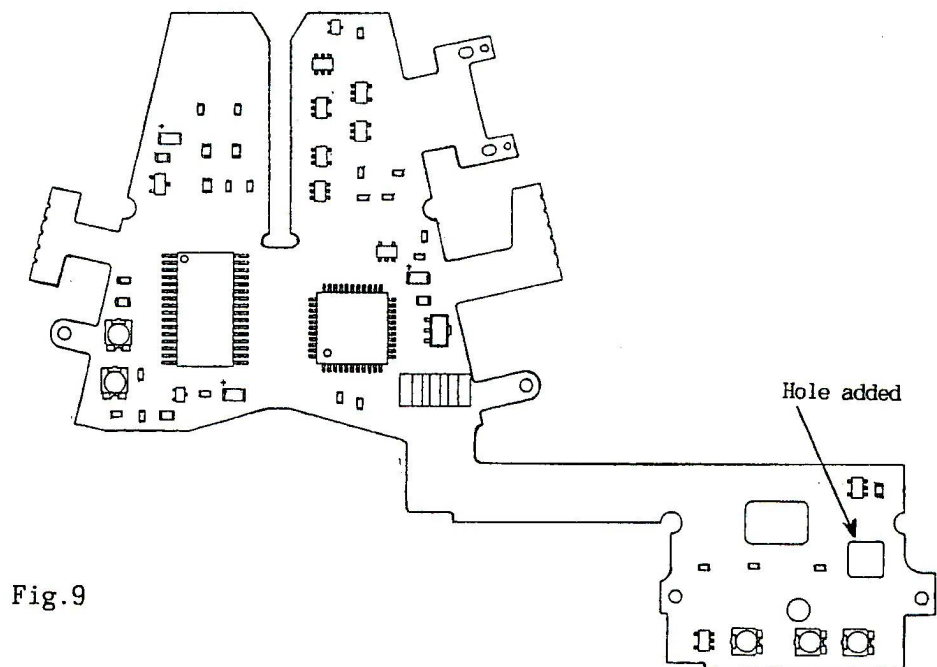
[Charge of CPU]

\* In the course of production, the CPU was changed, the pattern on the Main FPC was modified and the Auxiliary Board and Lug Plate were disused.

Old Main FPC Ass'y



New Main FPC Ass'y



\* The Auxiliary Board and Lug Plate (14716300) are not used with the new Main FPC Ass'y.

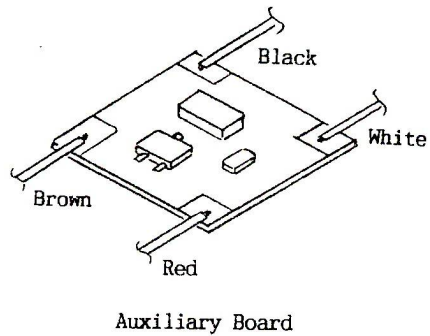


Fig.10

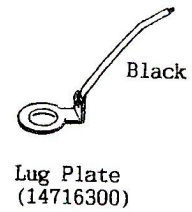


Fig.11

#### [Forming of Main FPC]

Attach Double Stick Tape to the back of the Main FPC Ass'y, peel off the base sheet from the Double Stick Tape and fold the Main FPC along the line (A)

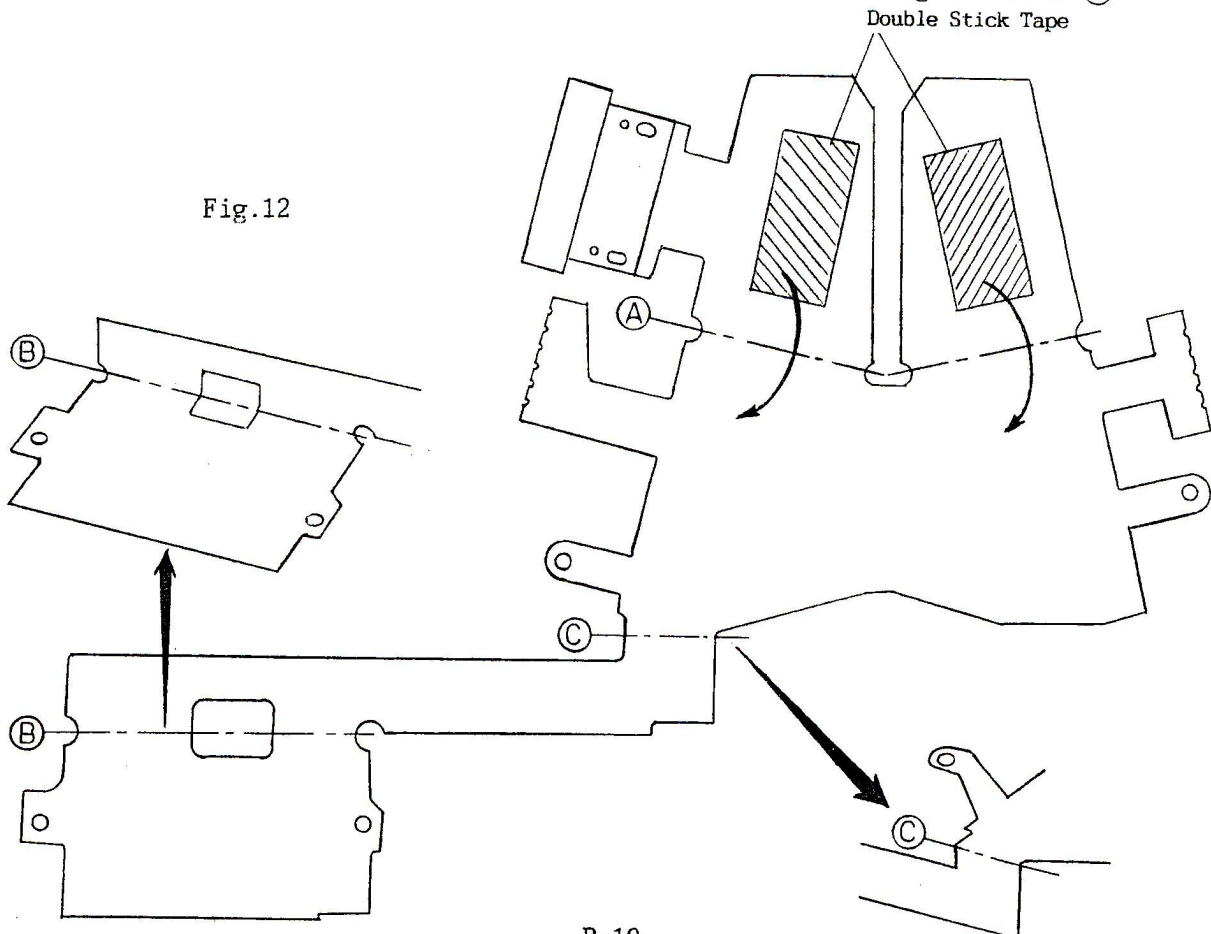


Fig.12



## Removal of Mirror Box Ass'y & Shutter unit

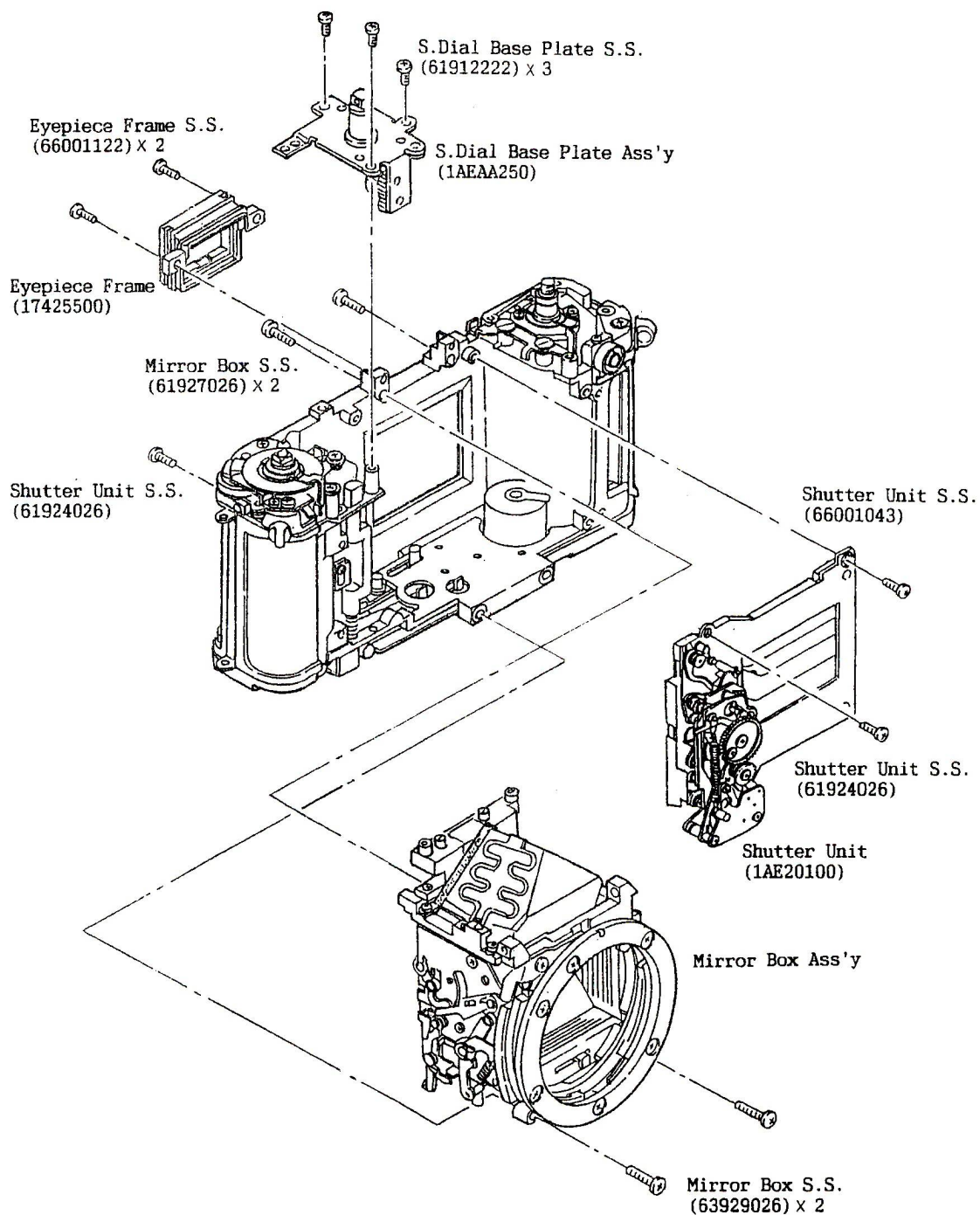


Fig.13

### B-3 REMOVAL OF MIRROR BOX ASS'Y

#### B-3-1 Removal of S. Dial Base Plate Ass'y

- 1) Remove the S. Dial Base Plate Setscrews (61912526) X 3.
- 2) Remove the S. Dial Base Plate Ass'y (1AEAA250).

#### B-3-2 Removal of Mirror Box Ass'y

- 1) Remove the Eyepiece Frame Setscrews (66001122) X 2 and take off the Eyepiece Frame (17425500).
- 2) Remove the Mirror Box Setscrews (63927026) X 2 and (63929026) X 2.
- 3) Remove the Mirror Box Ass'y (1AEAB010).

#### [Installation of S. Dial Base Plate Ass'y]

- 1) Set the Shutter Speed Setting Gear so that the screw (B) of the Shutter is positioned just above the screw (A). (Bulb position)
- 2) With the D-cut surface of the shaft facing as shown in Fig.14, install the S. Dial Base Plate on the Body.

#### Notes:

- a) In the early stage of production, a Washer (60121820) was provisionally used under the S. Dial Base Plate Ass'y. The Washer is not used with the new S. Dial Base Plate, which is different from the old one in the position of the caulked hole for Idle Gear.
- b) Tighten the screw (1) while pushing the Base Plate in the direction of the arrow. Then tighten the screws (2) and (3) in this order. This procedure is a provisional measure to prevent the Shutter Dial from being caught.

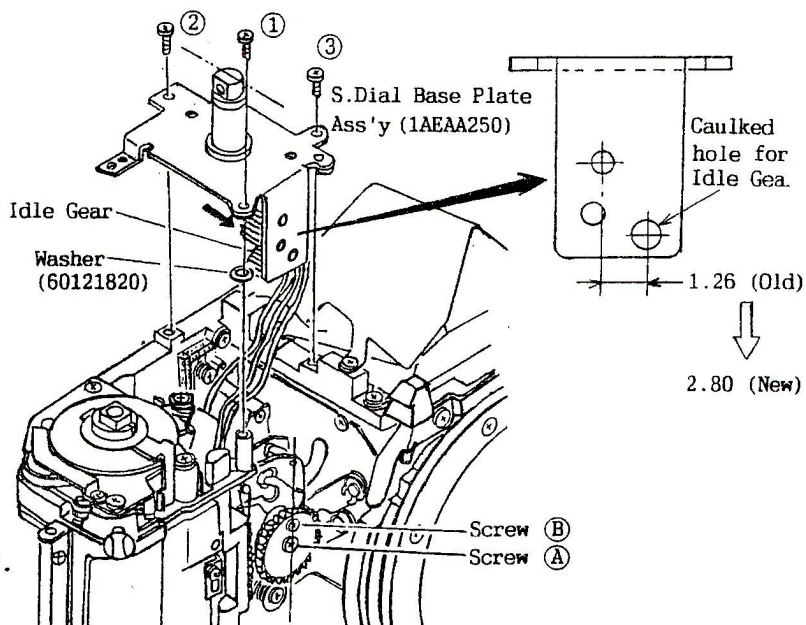


Fig.14

## B-4 REMOVAL OF SHUTTER UNIT

### B-4-1 Removal of Shutter Unit

- 1) Remove the Shutter Unit Setscrews (61924026) x 2 and (66001043).
- 2) Remove the Shutter Unit (1AE20100).

Note:

- a) One of the Shutter Unit Setscrews (61924026) is located under the Body Shield (Lower). Remove the Shutter Unit Setscrew with care not break the Body Shield (Lower).

### [Installation of Body Shielding Moquettes]

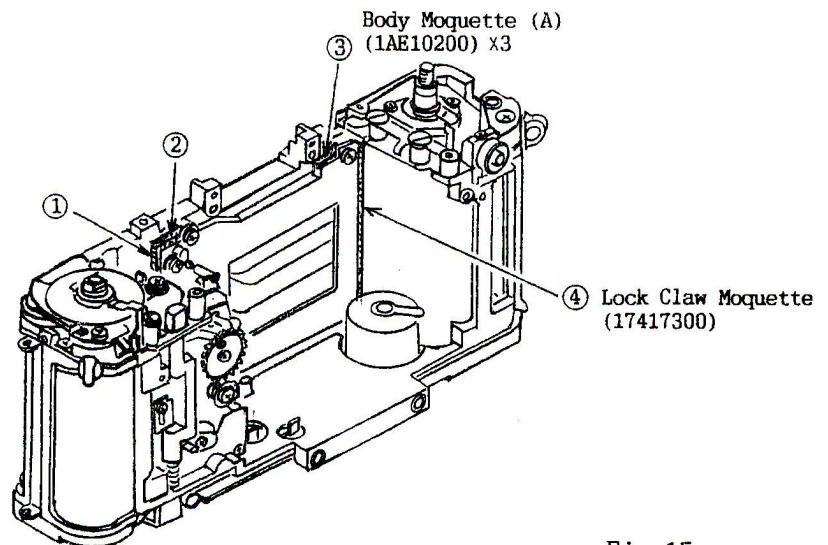


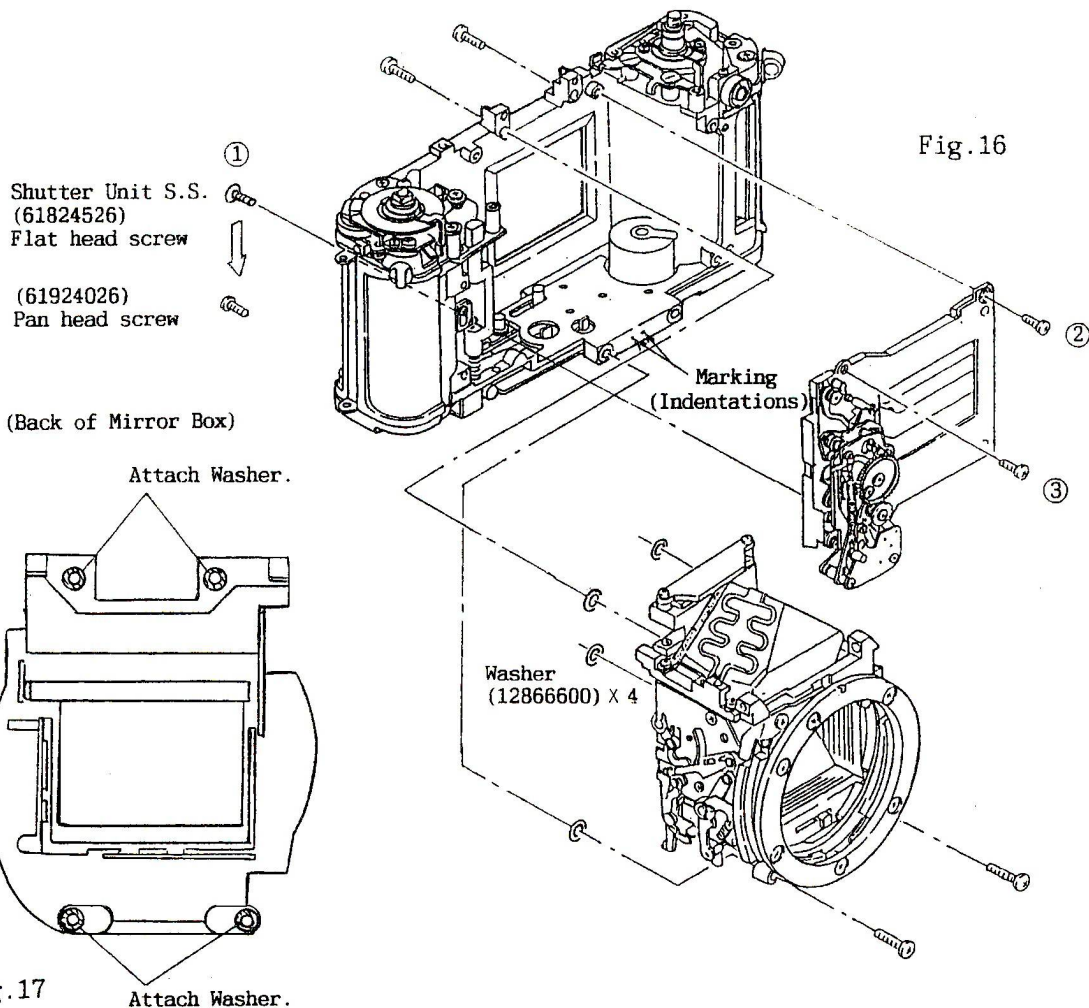
Fig.15

### [How to Attach]

- Attach the Body Moquette (A) ③ to the Shutter unit.
- Attach the Body Moquettes (A) ① and ③ to the Body.
- Attach the Lock Claw Moquette ⑤ to the Body.

[Change of Body]

- a) In the early stage of production, Washer (12866600) or (60652110) was attached in four positions on the back of the Mirror Box provisionally. Afterward, however, the Body was changed in shape and the Washer was disused.
- b) In the early stage of production, the Shutter Unit Setscrew (61824526), a flat head screw, was used. Afterward, however, the Shutter Unit Setscrew was replaced with a pan head screw (61924056) because of the change of the hole diameter in the Body. Yet, the flat head screw (61824526) can be used with the new Body.
- c) Tighten the Shutter Unit Setscrews in the order of ① (flat head screw), ② (Ni screw) and ③ (B. Zn screw).
- d) The new Body is marked with two or three indentations as shown in Fig.16.





# Disassembly of Winding Mechanism (Upper side of Body)

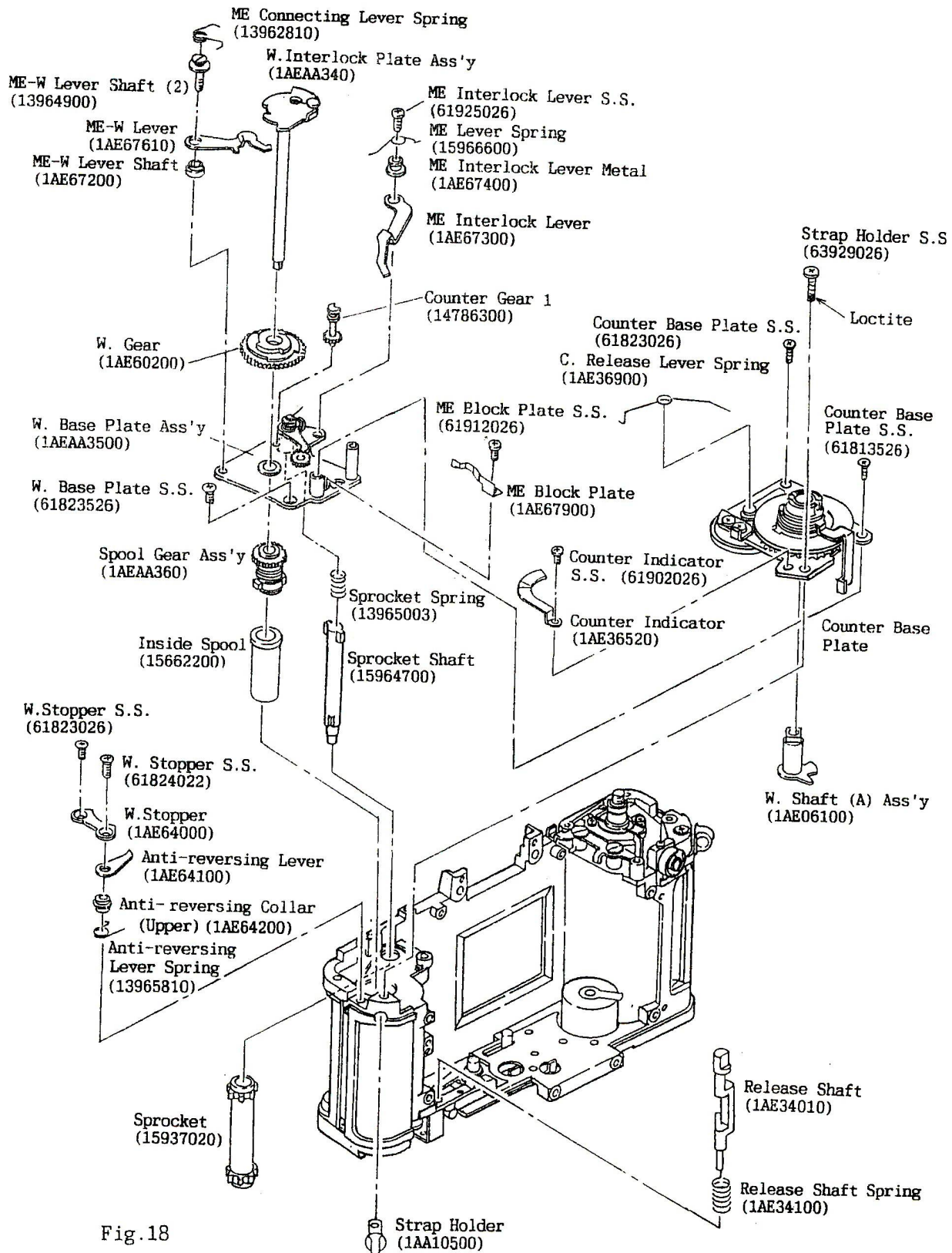


Fig.18

## B-5 DISASSEMBLY OF WINDING MECHANISM

### B-5-1 Removal of Counter Base Plate Ass'y

- 1) Remove the Counter Indicator Setscrew (61911526) and take off the Counter Indicator (1AE36520).
- 2) Remove the C. Release Lever Spring (1AE36900).
- 3) Remove the Strap Holder Setscrew (62919026) and take off the Strap Holder (1AA10510).
- 4) Remove the Counter Base Plate Setscrews (61823026) x 2 and take off the Counter Base Plate Ass'y.
- 5) Remove the W. Shaft (A) Ass'y (1AE06100).
- 6) Remove the Counter Gear (1) (14786300).

### B-5-2 Disassembly of Winding Mechanism

#### (Upper Side of Body)

- 1) Remove the ME Block Plate Setscrew (61912026) and take off the ME Block Plate (1AE67900).
- 2) Remove the ME Interlock Lever Setscrew (61925026) and take off the ME Lever Spring (15966600), ME Interlock Lever Metal (1AE67400) and ME Interlock Lever (1AE67300).
- 3) Remove the ME Connecting Lever Spring (13962800).  
Remove the ME-W Lever (1AE67610) and ME-W Lever Shaft (1AE67200) by taking out the ME-W Lever Shaft (2) (13964900).

#### (Lower Side of Body)

- 4) Remove the SR Lock Lever Retainer Setscrew (61914026) and take off the SR Lock Lever Retainer (1AE22300).
- 5) Remove the SR Lever (3) Shaft Screw (14743700) and take off the Winding Stopper Lever Spring (14761400).
- 6) Remove the Winding Stopper Lever Setscrew (61913026) and take off the Winding Stopper Lever Ass'y (1AEAA280).
- 7) Remove the E Ring (E-12) (66001225) and SR Lever Ass'y Setscrew (61912026) and take off the SR Lever Ass'y (1AEAA310).
- 8) Remove the SR Lever (3) Shaft Screw (1473700) and take off the SR Lever (3) Ass'y (1AEAA300).
- 9) Remove the SR Lever (3) Shaft Screw (14743700) and take off the SR Lock Lever (14743900) and SR Lock Spring (14744000).

# Disassembly of Winding Mechanism (Lower Side of Body)

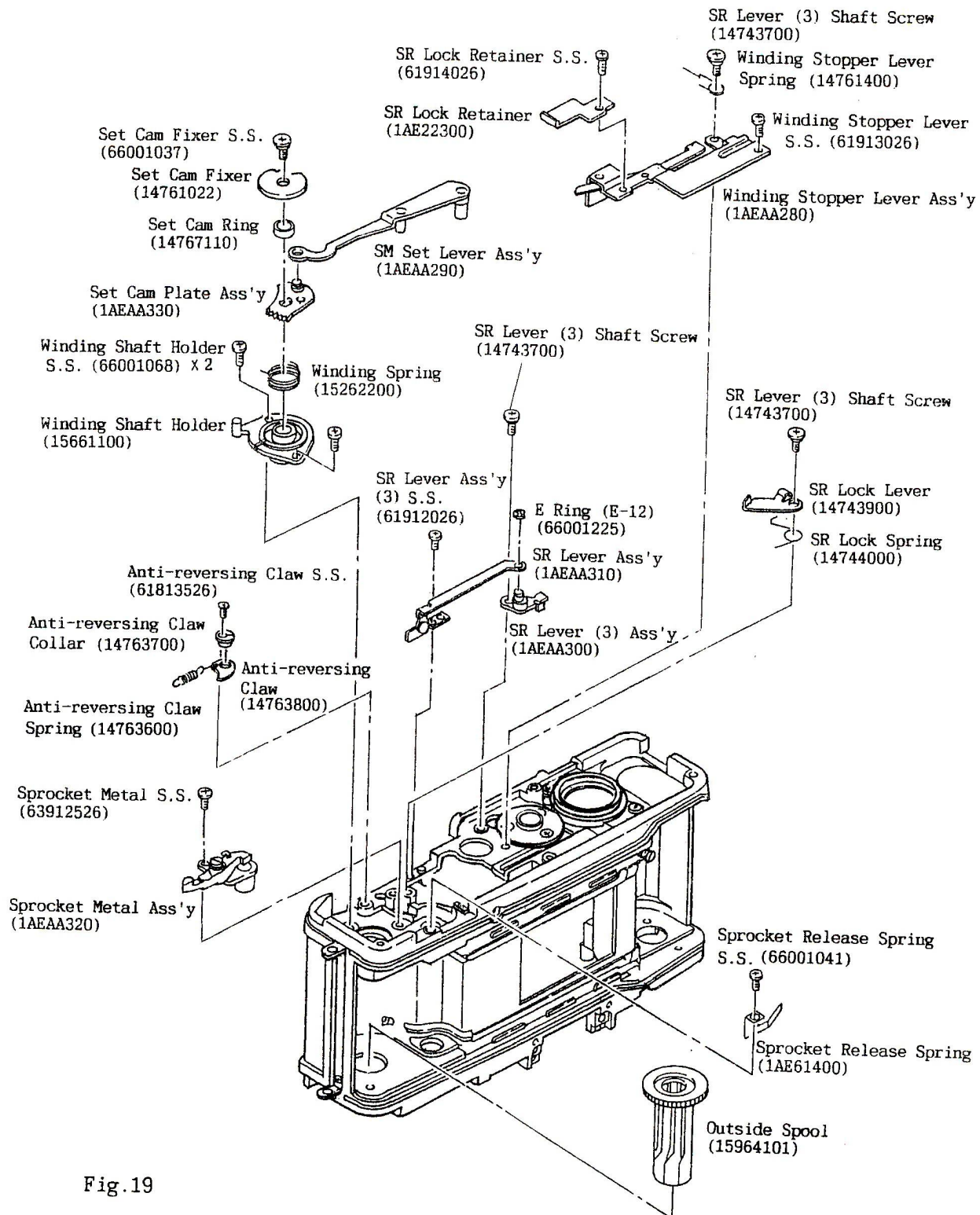


Fig.19



(Upper Side of Body)

- 10) Remove the W. Stopper Setscrews (61823026) and (61824022) and take off the W. Stopper (1AE64000), Anti-reversing Lever (1AE64100), Anti-reversing Collar (Upper) (1AE64200) and Anti-reversing lever Spring (1395810).

(Lower Side of Body)

- 11) Remove the Anti-reversing Claw Spring (14763600).
- 12) Remove the Anti-reversing Claw Setscrew (61813526) and take off the Anti-reversing Claw Collar (14763700) and Anti-reversing Claw (14763800).
- 13) Remove the Set Cam Fixer Setscrew (66001037) and take off the Set Cam Fixer (14761022), Set Cam Ring (14767110) and SM Set Lever Ass'y (1AEAA290).

**Notes:**

- a) The Set Cam Fixer Setscrew (66001037) is a reverse screw.
  - b) Since the Set Cam Fixer Setscrew is locked with Loctite, take due care when removing it.
- 14) Remove the Sprocket Release Spring Setscrew (61912526) and take off the Sprocket Release Spring (1AE61400).
  - 15) Remove the Sprocket Metal Setscrew (63912522) and take off the Sprocket Metal Ass'y (1AEAA320).
  - 16) Remove the Set Cam Plate Ass'y (1AEAA330) and Winding Spring (15262200).

**Note:**

- a) The Set Cam Plate Ass'y (1AEAA330) has been press-fitted on the W. Shaft (B).

(Upper Side of Body)

- 17) Remove the W. Interlock Plate Ass'y (1AEAA340) and W. Gear (1AE60200).
- 18) Remove the W. Base Plate Setscrew (61823526) and take off the W. Base Plate Ass'y (1AEAA350).
- 19) Remove the Sprocket Spring (13965003), Release Shaft Spring (1AE34100) and Release Shaft (1AE34010).
- 20) Remove the Sprocket Shaft (15963700) and Sprocket (15937020).
- 21) Remove the Spool Gear Ass'y (1AEAA360) and Inside Spool (15662200).

(Lower Side of Body)

- 22) Remove the Winding Shaft Holder Setscrews (66001068) x 2 and take off the Winding Shaft Holder (15661100) and Outside Spool (15964001).



## [Reassembly Procedure for Winding Mechanism]

(Lower Side of Body)

- 1) Install the Outside Spool (15964101) in the Body.
- 2) Apply grease HK-9 to the Winding Shaft Holder (15661100), install it on the Body and secure it with the Winding Shaft Holder Setscrews (66001068) x 2.

(Winding Shaft Holder)



Fig.20

(Upper Side of Body)

- 3) Install the Inside Spool (15662200) and Spool Gear Ass'y (1AEAA360) in the Outside Spool.
- 4) With the internal groove of the Sprocket (15937020) up and the mark of the Sprocket Shaft (15964700) toward the film rail surface, drop the Sprocket Shaft into the Sprocket by fitting the Shaft in the groove of the Sprocket. Then install the Sprocket in the Body.
- 5) Through the hole in the Body, install the Sprocket Spring (13965003) on the Sprocket.
- 6) Set the W. Base Plate Ass'y (1AEAA350) so that the marking-off line of Idle Gear (A) points to the center of the W. Metal when the slot of the Sprocket Gear faces the film rail surface of the Body.
- 7) Install the W. Base Plate Ass'y prepared in 6) on the Body and tighten the W. Base Plate Setscrew hand-tight.

Note:

When installing the W. Base Plate Ass'y on the Body, take care not to change the position of the Sprocket.

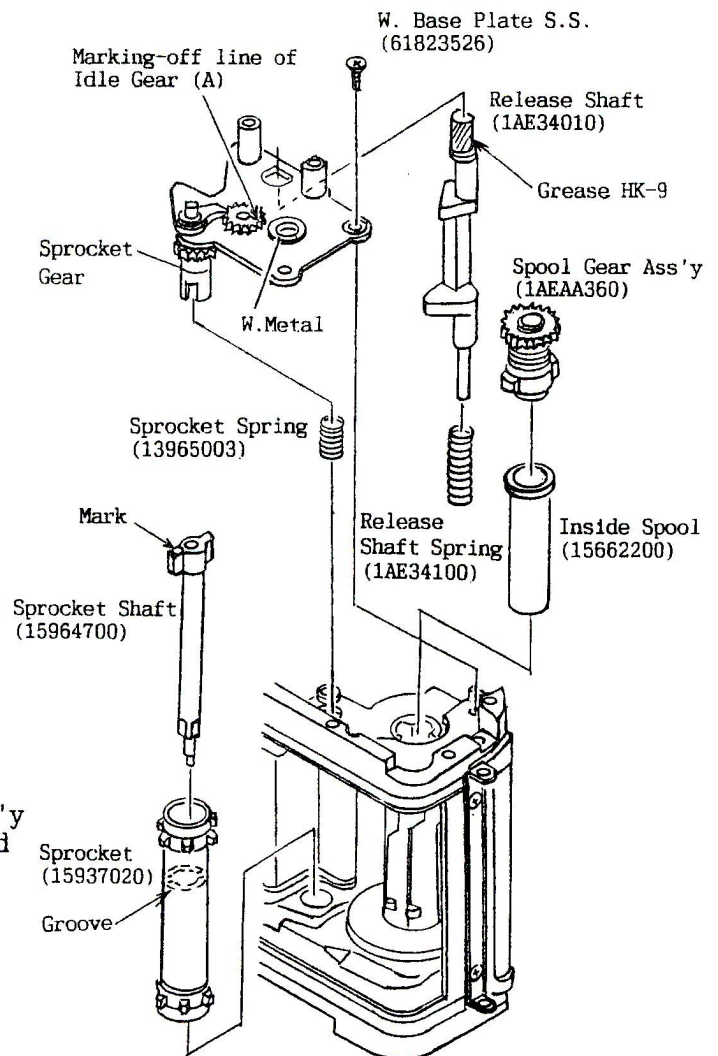


Fig.21

- 8) Put the Release Shaft Spring (1AE34100) on the Release Shaft (1AE34010) and install them on the Body while lifting up the W. Base Plate Ass'y. Tighten up the W. Base Plate Setscrew.
- 9) Engage the Idle Gear (A) on the W. Base Plate with the W. Gear (1AE60200) so that the marking-off line is positioned at the center-punched mark (●).
- 10) Install the W. Interlock Plate Ass'y (1AEAA340) in the position as shown by the arrow.

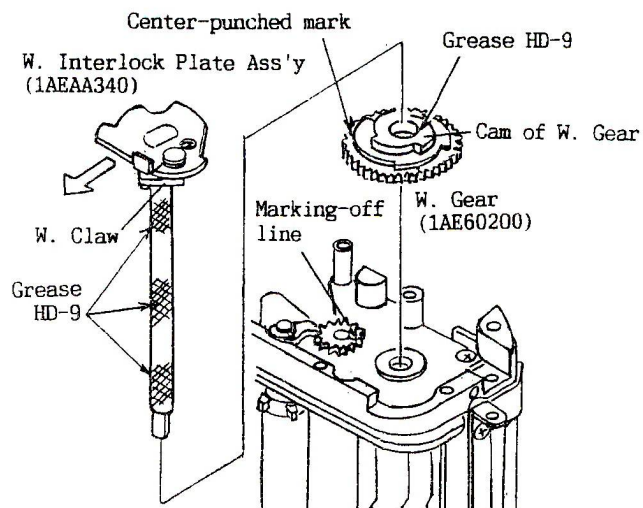


Fig.22

**Notes:**

- a) When installing the W. Interlock Plate Ass'y, take care that the engagement between the W. Gear and the Idle Gear (A) does not change.
- b) Take care that the W. Claw of the W. Interlock Plate Ass'y is not positioned on the cam of the W. Gear.

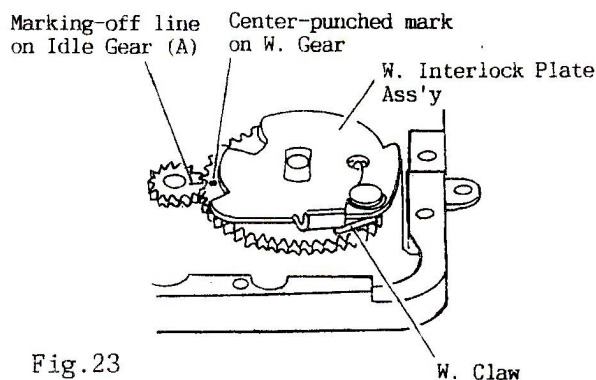


Fig.23

(Lower Side of Body)

- 11) Install the Winding Spring (15262200) by fitting it in the groove of the Winding Shaft Holder.
- 12) In the position as shown in Fig.24, fit the Set Cam Plate Ass'y (1AEAA330) gently on the W.Shaft (B).
- 13) With the end of the Winding Spring inserted in the hole of the Set Cam Plate Ass'y, press in the Set Cam Plate Ass'y.

**Notes:**

- a) When installing the Set Cam Plate Ass'y, take care that the engagement between the W. Gear and the Idle Gear (A) on the upper side of the Body does not change. Also take care that the W. Claw is

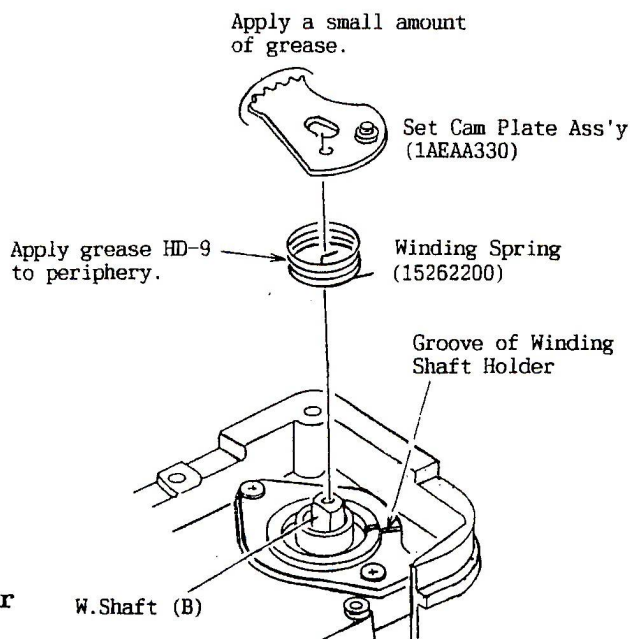


Fig.24

not caught between the cam of  
W. Gear. (See Fig.22)

- b) Be sure to the push the Set Cam  
Plate Ass'y down to the root of the  
W. Shaft (B) completely.

- 14) Install the Sprocket Metal Ass'y  
(1AEAA320) and tighten the Sprocket  
Metal Setscrew (63912522).
- 15) Install the Sprocket Release Spring  
(1AE61400) and tighten the Sprocket  
Release Spring Setscrew (61912526).
- 16) Set the QR Stop Lever Spring (15967700)  
as shown in Fig.25.  
Lock the QR Stop Lever Spring with  
bond (C-551).

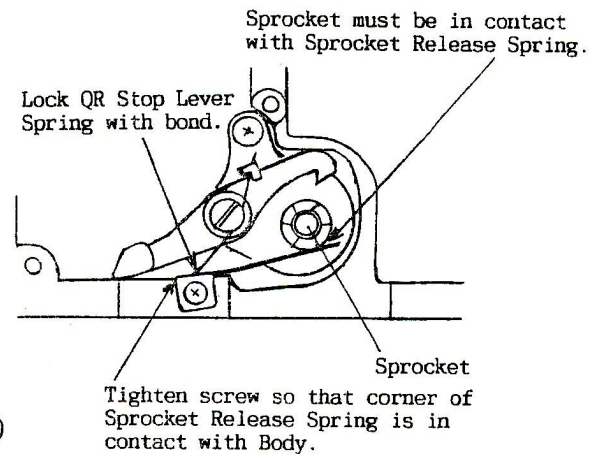


Fig.25

Notes:

- a) Secure the Sprocket Release Spring so that its corner is in contact  
with the Body.
- b) The Sprocket must be in contact with the Sprocket Release Spring.
- 17) Install the SM Set Lever Ass'y (1AEAA290).
- 18) Install the Set Cam Ring (14767110) and Set Cam Fixer (14761022) and  
tighten the Set Cam Fixer Setscrew (66001037) (reverse screw).
- 19) Hook the Anti-reversing Claw Spring (14763600) to the Anti-reversing Claw  
(14763800), install the Anti-reversing Claw and Anti-reversing Claw Collar  
(14763700) on the Body and tighten them with Anti-reversing Claw  
Setscrew (61813526).
- 20) Hook the end of the Anti-reversing  
Claw Spring to the pin on the Winding  
Shaft Holder and lock it with bond  
(C-551).

(Upper Side of Body)

- 21) Fix the W. Stopper (1AE64000) with the  
W. Stopper Setscrew (61823026)  
provisionally in a position where it  
does not come in contact with the  
W. Interlock Plate Ass'y.
- 22) Turn the W. Interlock Plate Ass'y  
in the direction of the arrow  
(counterclockwise) by about 180  
degrees, move the W. Stopper to  
the normal position and stop  
turning the W. Interlock Plate  
Ass'y.

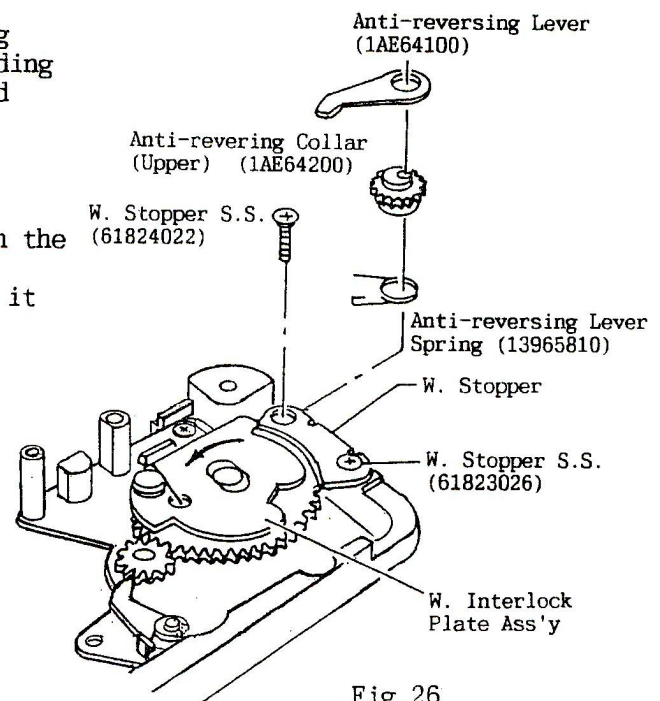


Fig.26



- 23) Combine the Anti-reversing Lever Spring (13965810), Anti-reversing Collar (Upper) (1AE64200) and Anti-reversing Lever (1AE64100), insert them between the W. Stopper and the Body and fix them with the W. Stopper Setscrew (61824022) hand-tight.

- 24) Set the Anti-reversing Lever Spring as shown in the Fig.27.

(Lower Side of Body)

- 25) Put the SR Lock Spring (1474400) and SR Lock Lever (14743900) together and tighten them with the SR Lever (3) Shaft Screw (14743700).

- 26) Set the SR Lock Spring as shown in Fig.28.

- 27) Install the SR Lever (3) Ass'y (1AEAA300) and tighten it with the SR Lever (3) Shaft Screw (14743700).

- 28) Install the SR Lever Ass'y (1AEAA310) and tighten it with the SR Lever Ass'y Setscrew (61912026).

- 29) Insert the post of the SR Lever (3) in the hole of the SR Lever Ass'y and install the E Ring (E-12) (66001225).

- 30) Install the Winding Stopper Lever Ass'y (1AEAA280) and tighten it with the Winding Stopper Lever Setscrew (61913026).

- 31) Pass the SR Lever (3) Shaft Screw (14743700) through the Winding Stopper Lever Spring (14761400) and tighten it.

- 32) Set the Winding Stopper Lever Spring as shown in Fig.29.

- 33) Install the SR Lock Lever Retainer (1AE22300) and tighten the Winding Stopper Lever Setscrew (61914026).

(Upper Side of Body)

- 34) Install the ME-W Lever Shaft (1AE67200) and ME-W Lever (1AE67610) and tighten them with the ME-W Lever Shaft (2) (13964900). Then install the ME Connecting Lever Spring (13962810).

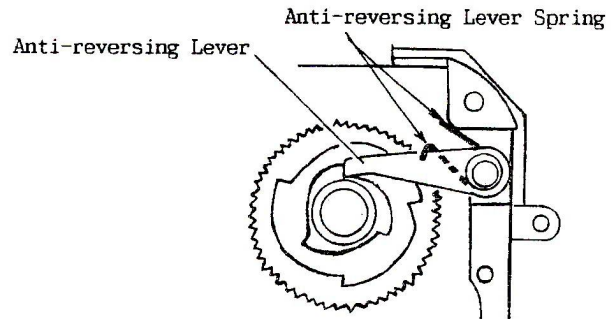


Fig.27

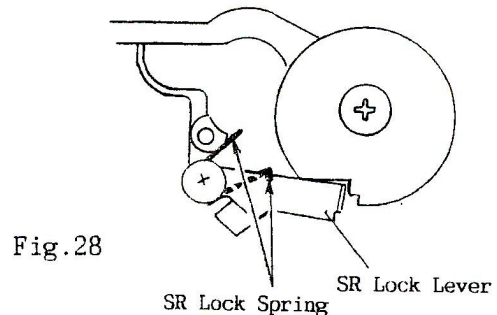


Fig.28

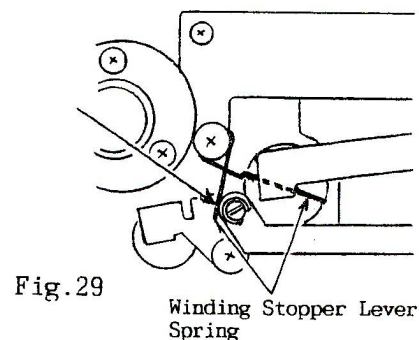


Fig.29

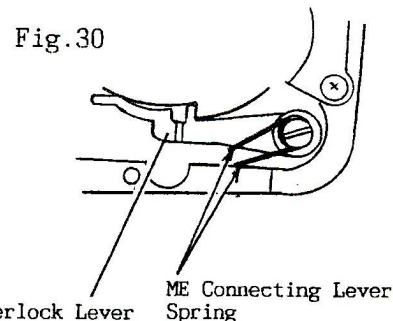
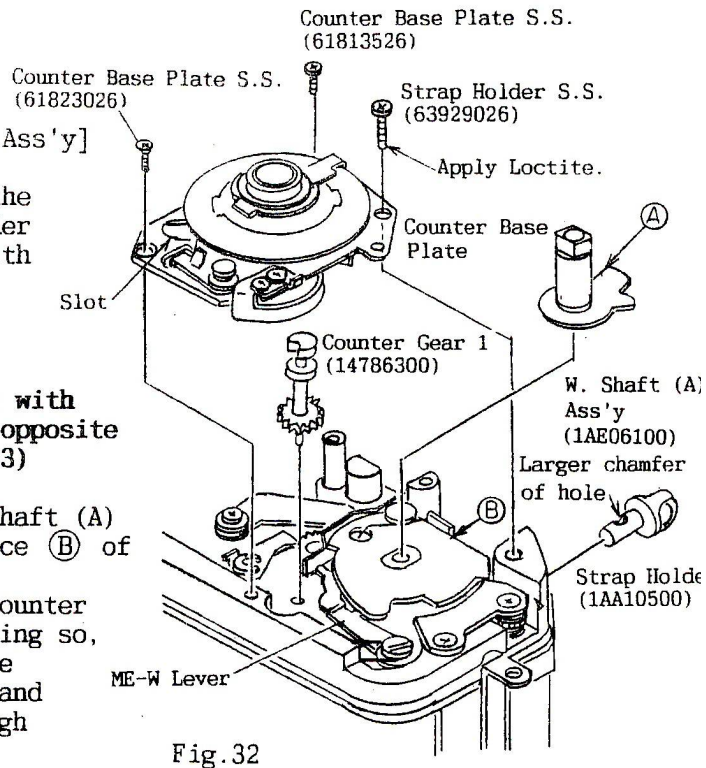
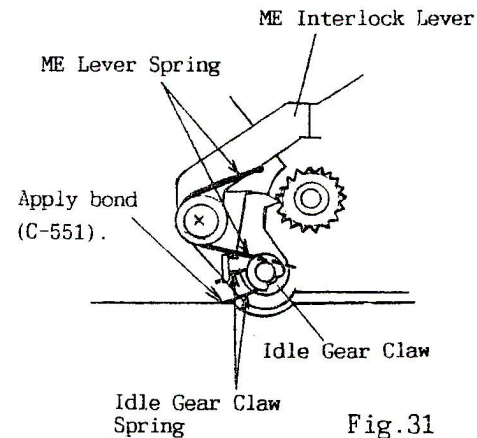


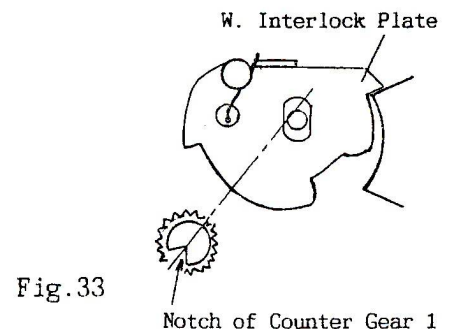
Fig.30



- 35) Set the ME Connecting Lever Spring as shown in Fig.30.
- 36) Install the ME Interlock Lever (1AE67300), ME Interlock Lever Metal (1AE67400) and ME Lever Spring (15966600) and tighten them with the ME Interlock Lever Setscrew (61925026).
- 37) Set the ME Lever Spring as shown in Fig.31.
- 38) Set the Idle Claw Spring as shown in Fig.31 and lock the body-side end of the Idle Gear Claw Spring with bond (C-551).
- 39) Install the ME Block Plate (1AE67900) and tighten the ME Block Plate Setscrew (61912026).



- 3) Tighten the Counter Base Plate Setscrews (61823026) and (61813526).
- 4) With the larger chamfer of the screw hole up, install the Strap Holder (1AA10500) on the body and tighten it with the Strap Holder Setscrew (63929026).



- 5) Install the C. Release Lever Spring (1AE36900) and set it. (See Fig.34)
- 6) Install the Counter Indicator (1AE36520) and tighten the Counter Indicator Setscrew (61902026).
- 7) Apply bond (C-551) to the head of the Counter Indicator Setscrew.

**Note:**

- a) Install the Counter Indicator so that it is in parallel with the side of the Body and the triangle mark points to the "S" on the Counter Name Plate.

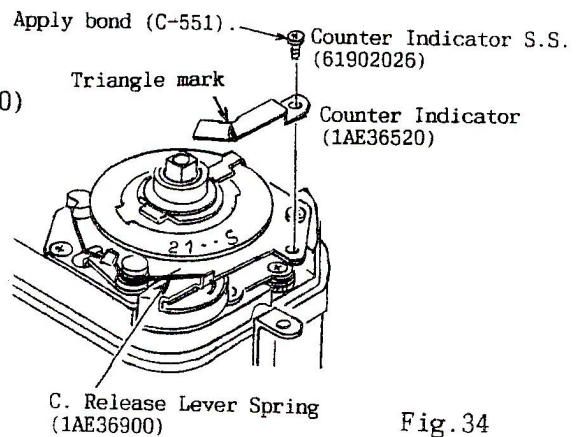


Fig.34

[Reassembly of Counter Base Plate]

- 1) Apply bond (C-551) to the Counter Gear (2) (1AE36310).
- 2) Attach the Counter Name Plate (15989200).
- 3) Install the W. Hanger Spring (1AE63730) on the Counter Base Plate (K) Ass'y (1AEAA450) and tighten it with the W. Hanger Spring Setscrews (61902026) X 2.
- 4) Hook one end of the Counter Spring (1AE36620) to the Counter Base Plate (K) Ass'y.
- 5) Hook the other end of the Counter Spring to Counter Gear (2).
- 6) Install the Counter Name Plate W/Counter Gear (2) and turn the Counter Gear (2) counterclockwise until it is stopped. Then lift up the Counter Gear (2) slightly with your hand and turn it counterclockwise. When the Counter Gear (2) has passed the stopper on the Counter Base Plate (K), put the Counter Gear (2) down.
- 7) Install the ME Coupling Ring (1AE66710) and ME Coupling Lever (1AE67800) and tighten the F. Cover Retaining Nut (1AE63800).

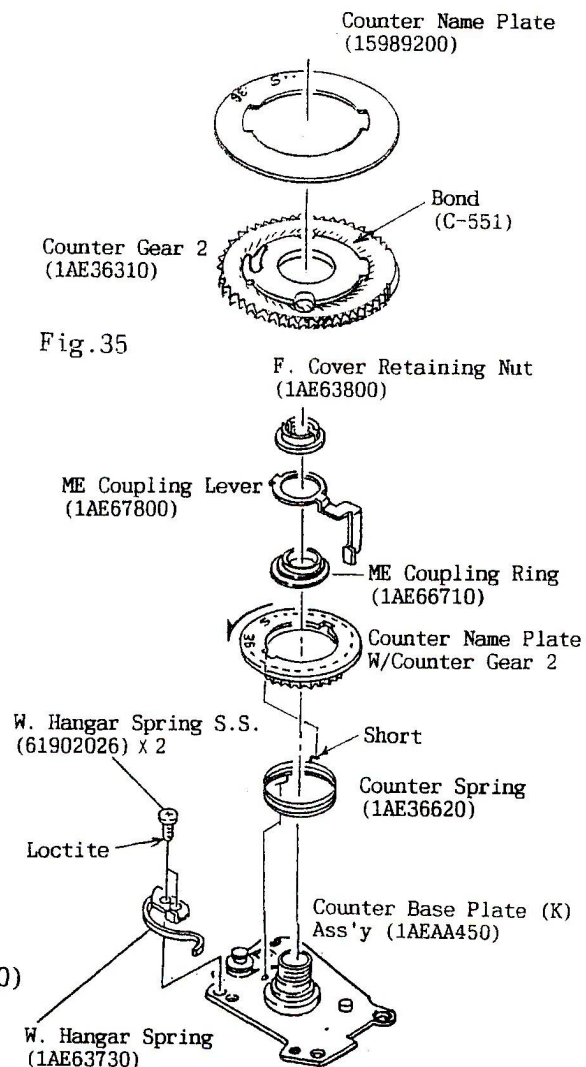


Fig.36

## B-6 DISASSEMBLY OF MIRROR BOX ASS'Y

### B-6-1 Removal of Viewfinder Parts

- 1) Remove the Eyepiece Holder Ass'y Setscrews (61914026) x 2 and take off the Eyepiece Holder Ass'y (1AEAB160).
- 2) Remove the Penta Prism Holder Setscrews (63913526) x 4 and take off the Penta Prism Ass'y (1AEAB150).
- 3) Remove the four Focus Adjustment Washers.

#### Note:

- a) In reassembly, install the removed four Focus Adjustment Washers. If finder focusing is found faulty, replace the Focus Adjustment Washers with new ones and make the adjustment of finder focusing.

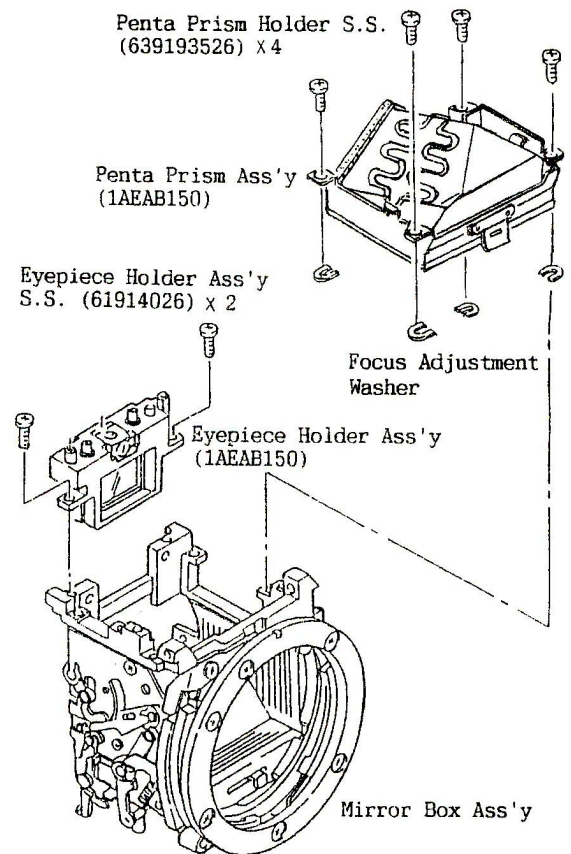


Fig. 37

### B-6-2 Disassembly of Penta Prism Ass'y

- 1) Peel off the Penta Dust-proof Moquette (13985800).
- 2) Remove the shielder from the periphery of the Penta Prism.
- 3) Remove the Penta Prism Fixer (15986200).
- 4) Remove the Penta Cover (17484210), Penta Prism (1AE84200) and Penta Prism Retaining Plate (1AA82200).
- 5) Remove the PG Holder by pulling the Screen Replacing Claw of the Penta Prism Holder and take out the Focusing Glass (17484900).
- 6) Remove the Finder Mask Frame (1AE84510).

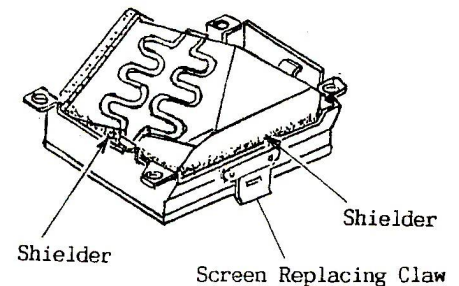


Fig. 38



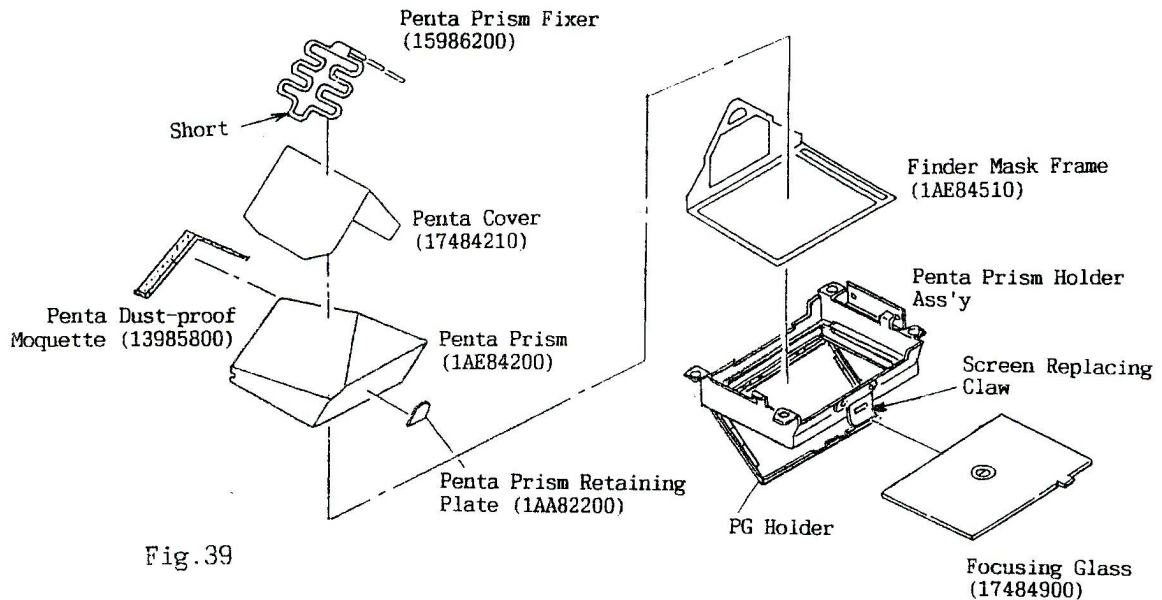


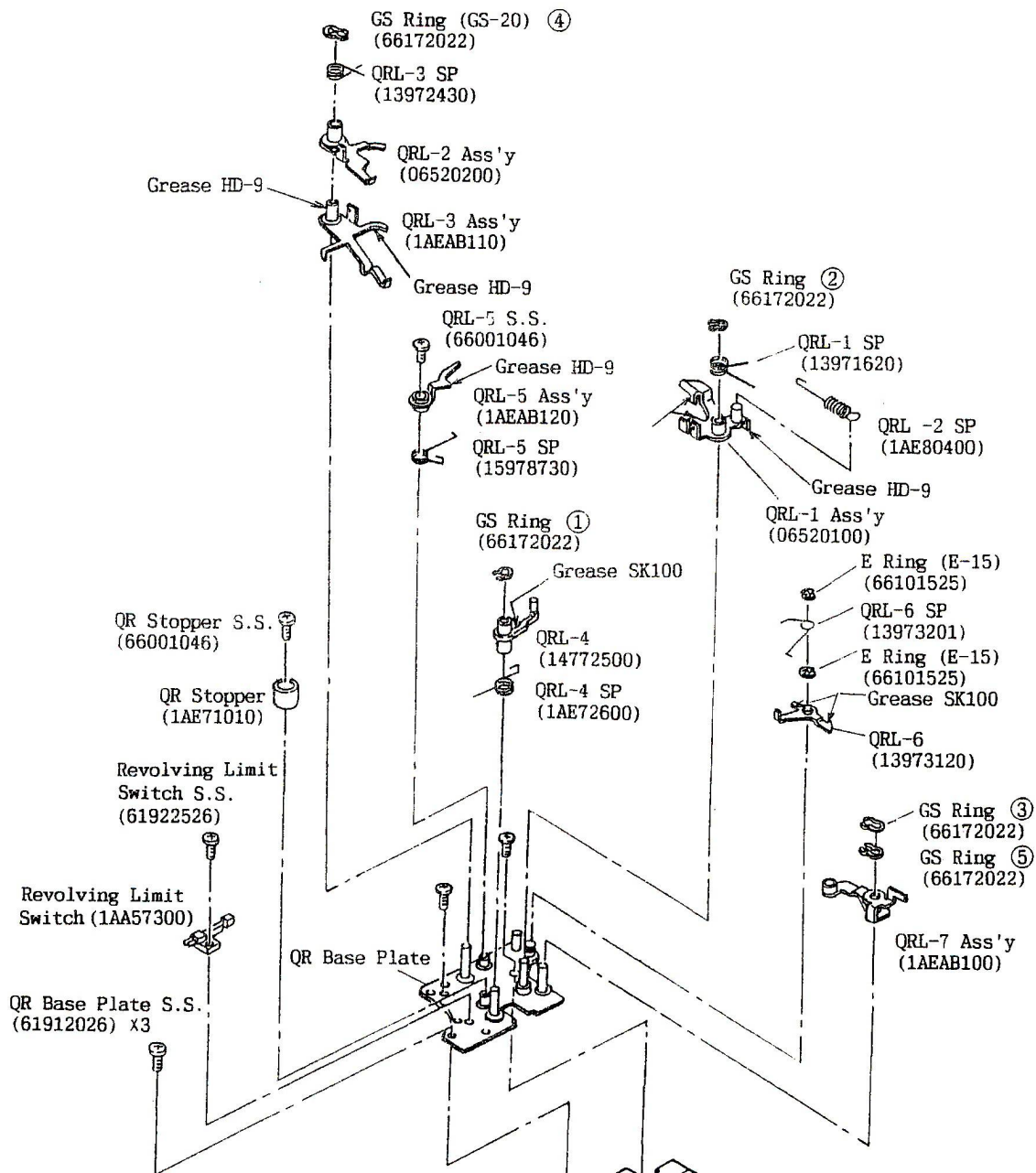
Fig.39

#### B-6-3 QR Base Plate Ass'y

- 1) Remove the QR Base Plate Setscrews (61912026) × 3 and take off the QR Base Plate Ass'y (1AEAB020).
- 2) Remove the Revolving Limit Switch Setscrew (61922526) and take off the Revolving Limit Switch (1AA57300).
- 3) Remove the GS Ring (GS-20) (66172022) ① and take off the QRL-4 (14772500) and QRL-4 Spring (1AE72600).
- 4) Remove the QRL-2 Spring (1AE80400).
- 5) Remove the GS Rings (GS-20) (66172022) ② and ③. Then take off the QRL-1 Spring (13971620) and QRL-1 Ass'y (06520100).
- 6) Remove the GS Ring (66172022) ④ and take off the QRL-3 Spring (13972430), QRL-2 Ass'y (06520200) and QRL-3 Ass'y (1AEAB110).
- 7) Remove the QRL-5 Setscrew (66001046) and take off the QRL-5 Ass'y (1AEAB120) and QRL-5 Spring (15978730).
- 8) Remove the E Ring (E-15) (66101525) and take off the QRL-6 Spring (13973201).
- 9) Remove the E Ring (E-15) (66101525) and take off the QRL-6 Spring (13973120).
- 10) Remove the GS Ring (66172022) ⑤ and take off the QRL-7 Ass'y (1AEAB100).



# Disassembly of QR Base Plate Ass'y



[Grease Application Position  
on QR Base Plate]

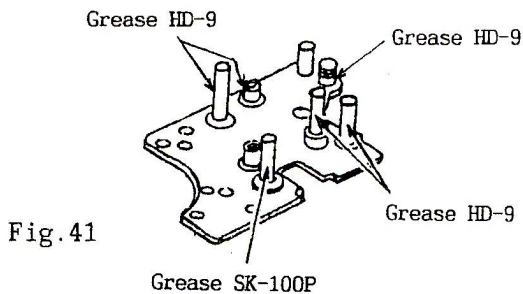


Fig.41

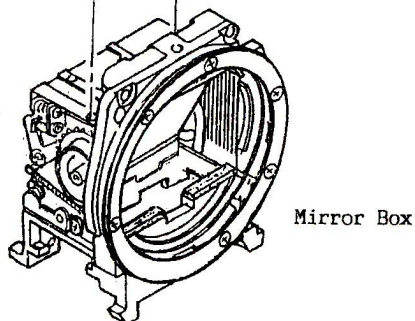


Fig.40

## [How to Set Spring on QR Base Plate Ass'y]

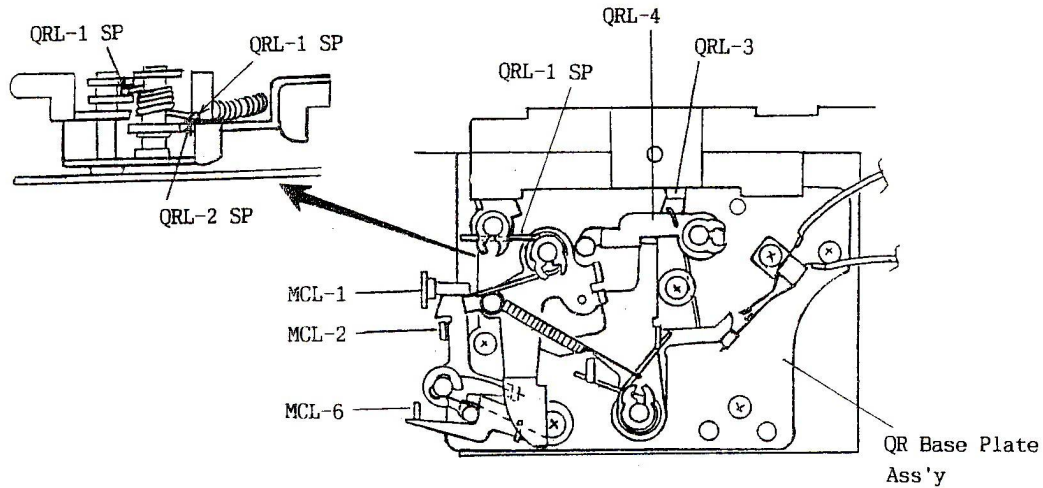


Fig. 42

(Bottom View of Mirror Box)

## [How to Install Revolving Limit Switch]

Push the Revolving Limit Switch in the direction of the arrow as far as the play is eliminated.

### (Adjustment of Revolving Limit Switch)

The standard adjustment is as follows:

- The Revolving Limit Switch must be kept OFF until the middle point (\* mark) of the width of the QRL-3 passes the point (C).
- Make sure that the switch is turned ON after the point \* has passed the point (C). Also make certain that the contact (A) is slightly pushed back by the contact (B) at turning-ON.
- If the conditions a) and b) are not met, make adjustment by bending the contact (A). (Take care not to bend the contact (A) excessively.)

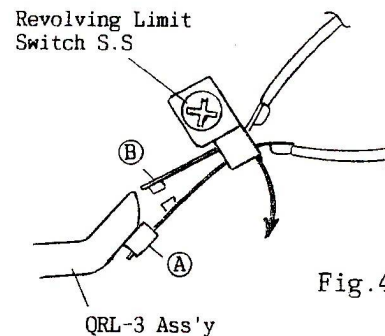


Fig. 43

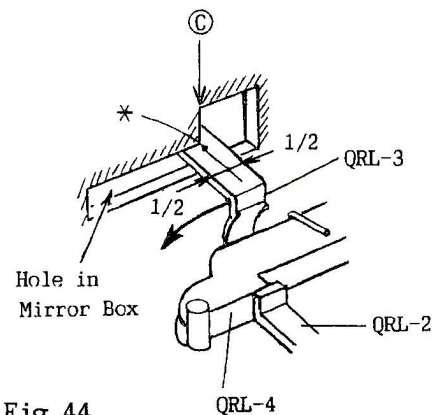


Fig. 44

[Adjustment of Mounting Position of AVR Ass'y]

- 1) Turn the F. Stop Connecting Ring (13982310) until it comes in contact with the Stopper on the open side (in the direction of the arrow).  
(See Fig.45)
- 2) With the arrow mark of the F. Stop Interlock Gear positioned as shown in Fig.46, engage the F. Stop Interlock Gear with the gear of the F. Stop Connecting Ring.
- 3) Tighten the AVR Ass'y Setscrews (61912026) X 2.
- 4) Turn the F. Stop Connecting Ring clockwise once. Then turn it back again and make sure that the arrow mark on the F. Stop Interlock Gear returns to the position shown in Fig.46.

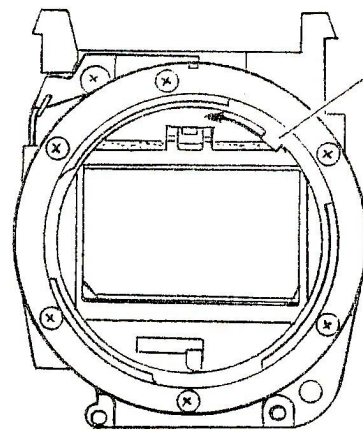


Fig.45

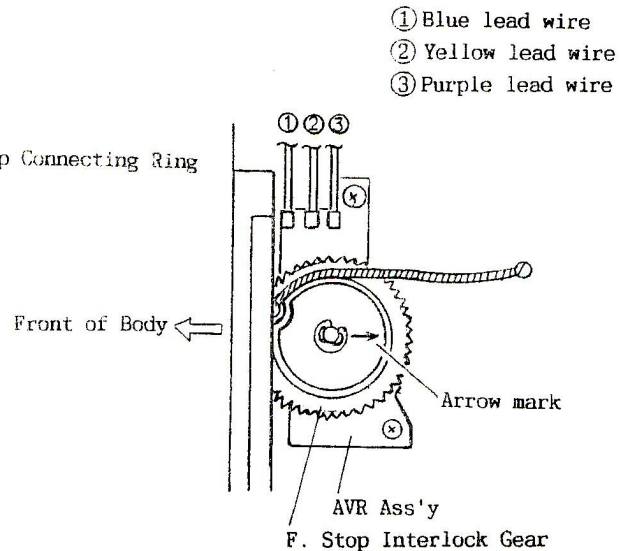


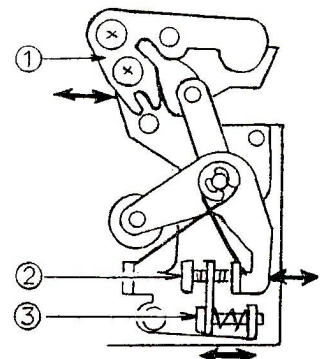
Fig.46

[Notes on Repair on ML Base Plate Ass'y]

\* The horizontal and 45-degree positions of the Mirror have been adjusted on the ML Base Plate Ass'y. Therefore, do not remove the ML Base Plate Ass'y nor change the lever positions or turn the screws.

- ① Screw for horizontal position adjustment of mirror
- ② Screw for 45-degree position adjustment of mirror
- ③ Screws for vertical position adjustment of mirror and fine adjustment of focusing

\* When large adjustment of focusing is required, replace the washer under the Penta Prism Holder with an appropriate one.  
(Because of the field-of-view ratio of 95%, large adjustment of focusing by the screw ③ can cause parallax.)



(ML Base Plate Ass'y)

Fig.47

## B-6 OTHER PARTS

### B-6-1 Rewind Shaft

- 1) Apply grease HD-9 to the Rewind Shaft (15934200).
- 2) Pass the Rewind Shaft through the Rewind Shaft Holder (1AE43620) and install the Rewind Shaft Spring (13934300) in the direction shown in Fig.48.
- 3) Lock the Rewind Shaft Spring with bond (C-551).

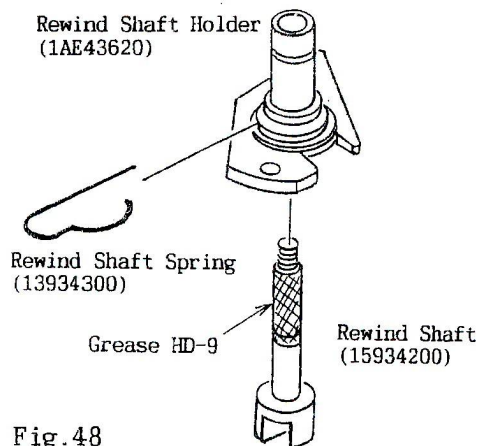


Fig.48

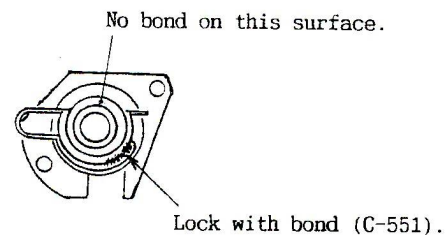


Fig.49

### B-6-2 Check Switch

- 1) Put the Exposure Check Switch (1AE34200) on the Check Switch Plate (1AE34400) and tighten it with the Exposure Check Switch Setscrew (61914526).
- 2) Bend upward by about 10 to 20 degrees the terminal of the Exposure Check Switch connecting the black lead wire.

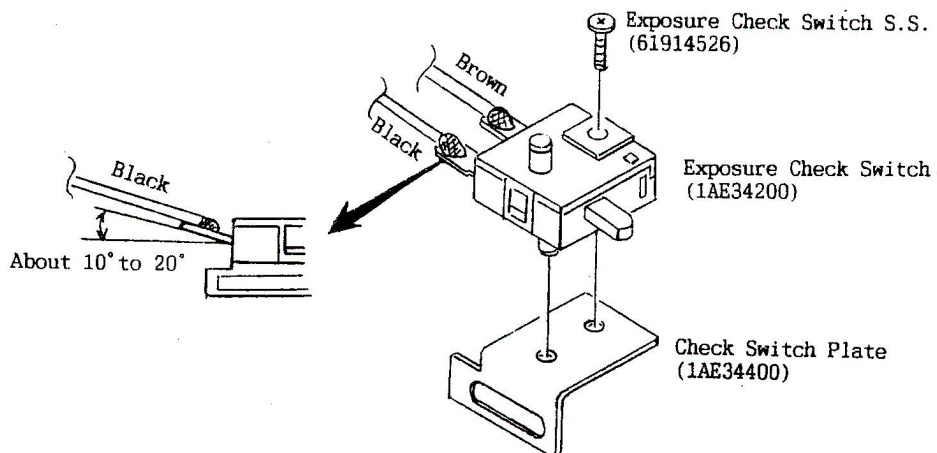


Fig.50

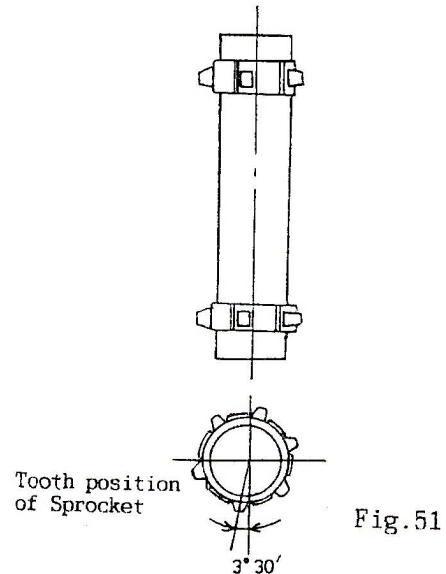


C. ADJUSTMENT PROCEDURE AND OTHERS

## C-1 ADJUSTMENTS OF WINDING MECHANISM

### C-1-1 Adjustment of Perforation Position

When the Winding Lever has been operated up to the fully wound position, the tooth position of the Sprocket (15937020) must be as shown in Fig.51. For Adjustment, change the position of the Sprocket Shaft (15964700) and the engagement between the marking-off line of the Idle Gear (A) and the center-punched mark of the W. Gear (1AE60200). (See page B-20)

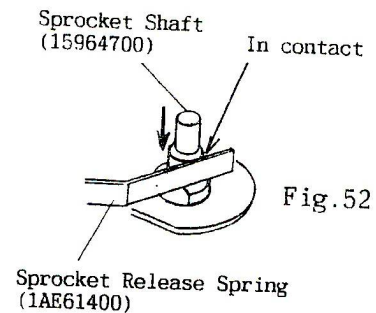


### C-1-2 Adjustment of Sprocket Shaft Operation

At press of the Rewind Button, the Sprocket Shaft must be locked and the Sprocket must become turnable freely. The idling of the Sprocket must be smooth without uneven turning or catching.

With your finger touching gently the middle portion of the Sprocket, push in the Sprocket Shaft and lock it, and operate the Winding Lever. Then make sure that the Sprocket Shaft is released and the Sprocket can not idle. Check these operations three times.

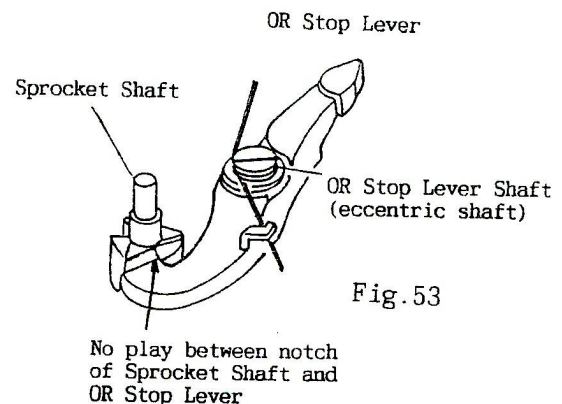
For adjustment, correct the position of the Sprocket Release Spring.



### C-1-3 Adjustment of OR Stopper Lever

When the Winding Lever has been operated, the OR Stop Lever must fit in the notch of the Sprocket Shaft without play. When the Rewind Lever is returned, the OR Stop Lever must be released from the notch of the Sprocket Shaft.

For adjustment, turn the OR Stop Lever Shaft.



#### C-1-4 Adjustment of Anti-reversing Lever

When the Winding Lever is operated with the Sprocket loaded lightly, the Anti-reversing Lever (1AE64100) must enter the cam portion of the W. Gear (1AE60200) immediately (0.1 mm) before the end of winding operation. For adjustment, turn the Anti-reversing Collar (Upper) (1AE64200) (eccentric collar).

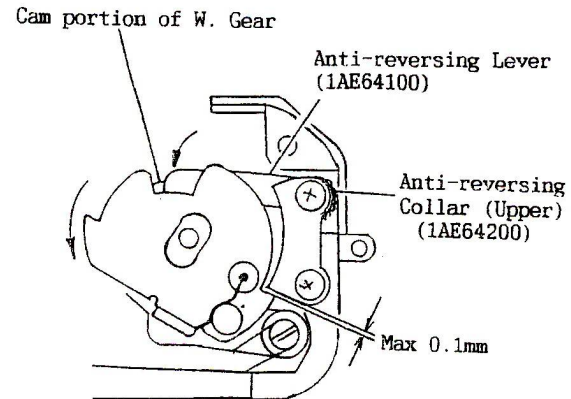


Fig. 54

#### C-1-5 Adjustment of ME Block Plate

During winding, when the outermost cam portion of the W. Gear is in contact with the ME-W Lever (1AE67610) as shown in Fig. 56 (when the Anti-reversing Claw on the bottom of the Body is engaged with the last tooth of the Setting Cam Plate), the clearance between the ME Block Plate (1AE67900) and the ME-W Lever must be 0.1 to 0.3 mm. (See Fig. 55)

Immediately before stop of winding, the end of the ME-W Lever must be engaged with the ME Block Plate.

For adjustment, loosen ME Block Plate Setscrew (61912026) and change the position of the ME Block Plate.

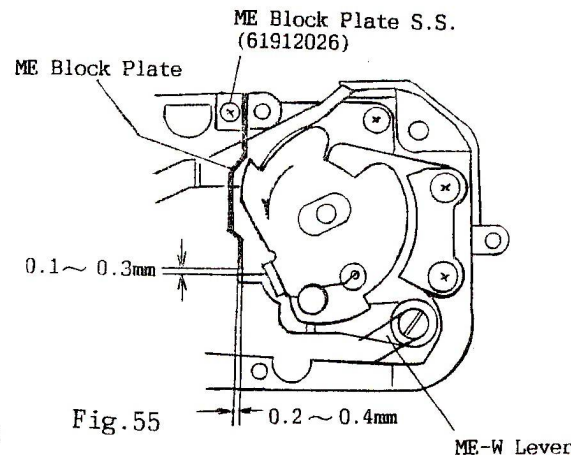


Fig. 55

#### Notes:

- When the W. Interlock Plate comes to the position as shown in Fig. 57 during its turning, make sure that the ME Block Plate is not pushing against the end of the W. Claw.
- During the winding operation of the W. Interlock Plate, the ME Block Plate must enter inside the end of the ME-W Lever. And after completion of winding, make sure that the ME-W Lever is unlocked when the W. Interlock Plate has passed the position shown in Fig. 57 during reversing.

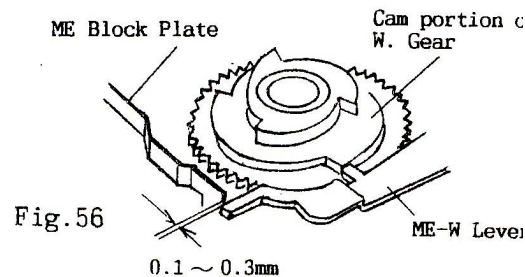


Fig. 56

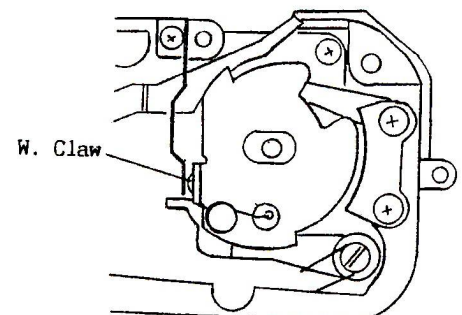
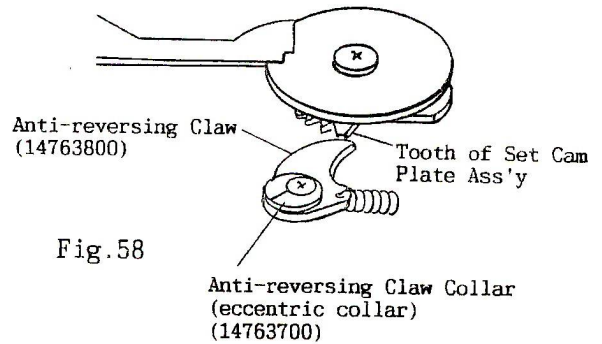


Fig. 57

- c) After adjustment, lock the ME Block Plate Setscrew with bond (C-551).

#### C-1-6 Adjustment of Anti-reversing Claw Release

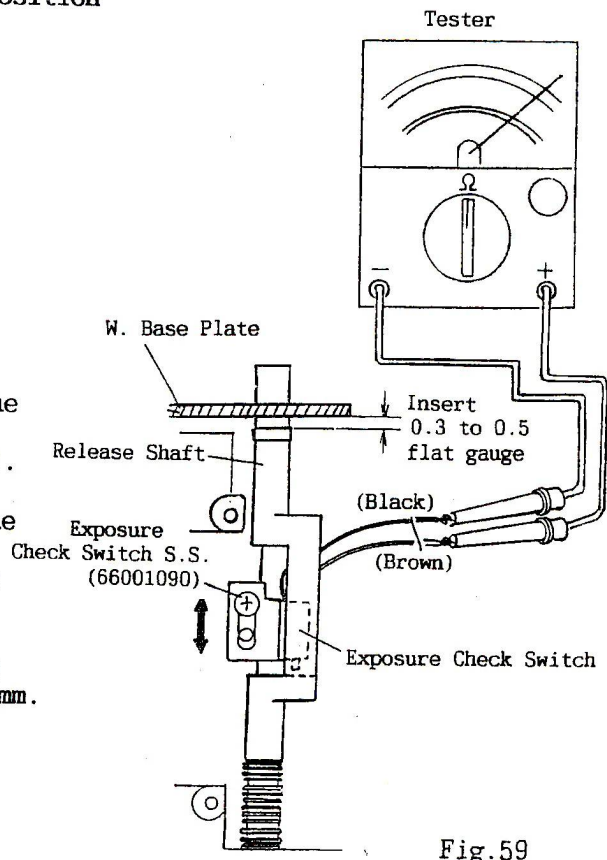
When the Winding Lever is operated with the Sprocket loaded lightly, the Anti-reversing Lever (1AE64100) must enter the cam portion of the W. Gear (1AE60200) immediately (0.1 mm) before the end of winding operation. And after that, the Anti-reversing Claw (14763800) must be released from the teeth of the Set Cam Plate Ass'y (1AEAA330). Make adjustment by turning the Anti-reversing Claw Collar (14763700).



#### C-2 ADJUSTMENTS OF OTHER MECHANISMS

##### C-2-1 Adjustment of Check Switch Plate Position

- 1) Set the tester resistance " $\Omega$ ".
- 2) Connect the (+) terminal of the tester to the brown lead wire of the Exposure Check Switch. Connect the (-) terminal of the tester to the black lead wire of the Exposure Check Switch.
- 3) Press the Release Shaft and insert a 0.5 mm flat gauge between the W. Base Plate and the Release Shaft. In this state, adjust the position of the Exposure Check Switch so that the switch is turned ON (current flowing).
- 4) Insert a 0.3 mm flat gauge between the W. Base Plate and the Release Shaft and make sure that the Exposure Check Switch is OFF. Make adjustment so that the Exposure Check Switch is turned ON at pressing down the Release Shaft by 0.3 to 0.5 mm.





- 5) After adjustment, lock the Check Switch Plate Setscrew (66001090) with bond (C-551).

#### C-2-2 Adjustment of Shutter Releasing Position at Use of Selftimer

After installing the Mirror Box Ass'y on the Body, adjust the shutter releasing position at use of selftimer.

[Check]

- 1) Set the Selftimer Lever in the direction of the arrow ①.
- 2) Operate the Winding Lever. Press the Release Shaft and, at the same time, move the Mirror up slowly.
- 3) The Selftimer must start operating immediately (0.3 mm or more) before the Mirror comes in contact with the Mirror Cushion.
- 4) If it does not start, make adjustment as follows:

[Adjustment procedure]

- 1) Using tweezers, bend the Lever ② of the Shutter slightly in the direction of the arrow.
- 2) Set the Selftimer Lever in the direction of the arrow ①.  
(The Lever must not return of itself.)  
The Selftimer Lever may return of itself if the Lever ② is bent excessively. In such a case, correct the bend so that the Selftimer Lever does not return of itself.
- 3) After making sure that the Selftimer Lever does not return of itself, take the steps 1) and 2) of "Check" above.
- 4) Perform setting of Selftimer, winding and shutter release and make sure that the Selftimer starts.
- 5) Perform the operations 3) and 4) once again.

Half of tooth height should be engaged. (Reference)  
(When shutter is set and selftimer is charged)

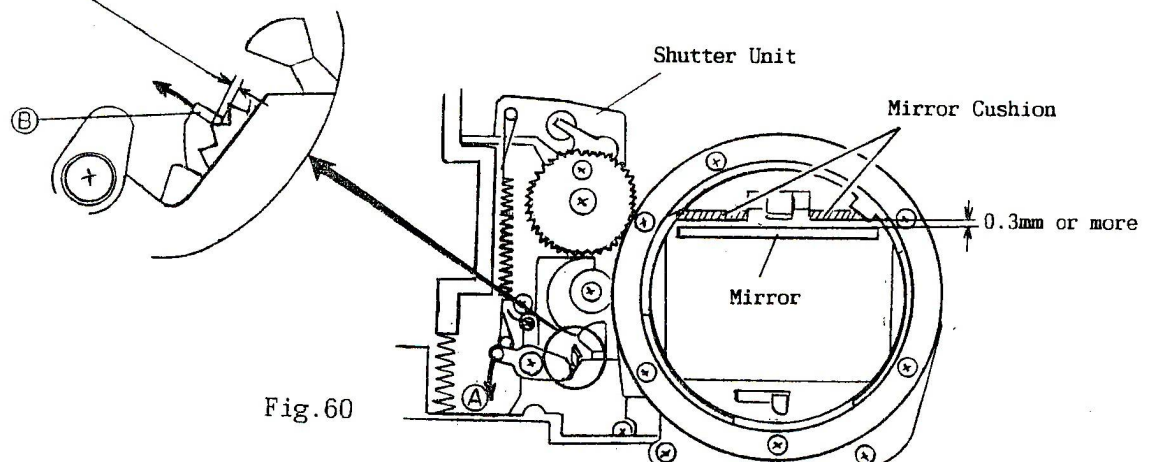


Fig.60

### C-2-3 Adjustment of S. Dial Click

\* Make adjustment so that the click of the S. Dial Base Plate Ass'y and the click of the Shutter occur at the same time.

[Adjustment procedure]

- 1) Set the Shutter Speed Setting Gear so that the screw (A) of the Shutter is positioned just above the screw (B). (Bulb position)
- 2) Loosen the screws (A) and (B).
- 3) Engage the S. Dial Base Plate Ass'y (in the "bulb" position) with the Shutter Speed Setting Gear from above.
- 4) Tighten the screw (B). (Take care not to apply an irrational force to the Shutter Speed Setting Gear.)
- 5) Tighten up the screw (A).
- 6) Tighten the S. Dial Base Plate Setscrews.
- 7) By turning the S. Dial Shaft clockwise and counterclockwise, make sure that double clicks do not occur.

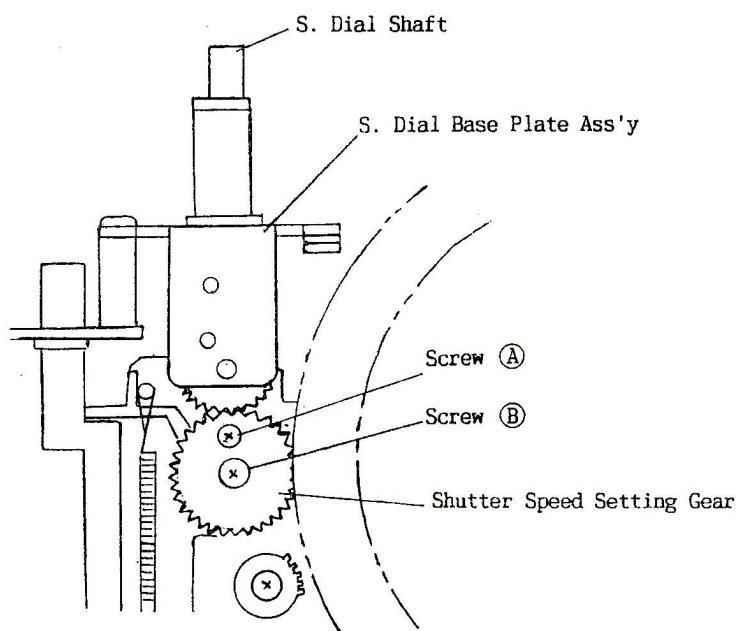


Fig.61

#### C-2-4 Adjustment of Shutter Releasing Position at Press of Shutter Release Button

\* After installing the Top Cover, make adjustment of shutter releasing position.

[Adjustment procedure]

- 1) Charge the Mirror Box mechanism and Shutter by performing winding operation.
- 2) Press down the Release Button and check to see if the Shutter operates when the Release Button is leveled with the Main Switch Dial (when A and B is in the same level). (See Fig.62)
- 3) If the Shutter does not operate, make adjustment by turning the SR Lever (3) Post (eccentric pin). (See Fig.63)

Note:

a) On the camera having been already adjusted, the SR Lever (3) Post has been locked with Crazy glue or Super glue, so that it can not be turned.  
In such a case, make adjustment by bending the SR Lever (3) with flat pliers.

- 4) After adjustment, check the following conditions:

- The shutter must not trip of itself after winding.
- With the Aperture Button pressed, the shutter must not trip of itself after winding.
- The QRL-4 must not be too close to the end of the hole in the Body.

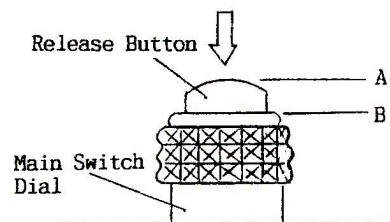


Fig.62

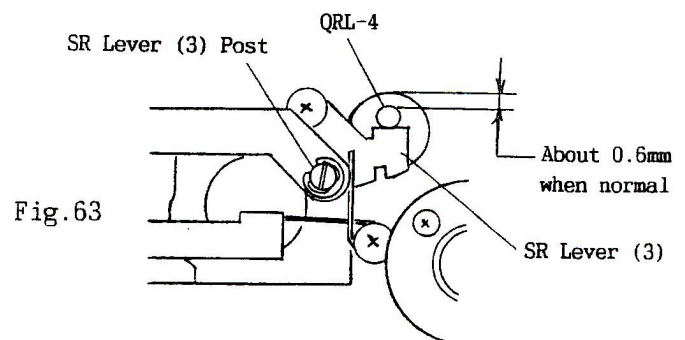


Fig.63

- 5) After adjustment, apply a small amount of Crazy glue or Super glue to the SR Lever (3) and SR Lever (3) Post and then apply bond (C-551).

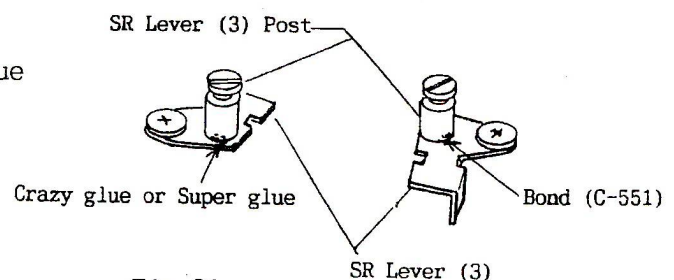


Fig.64

## C-3 OTHER ADJUSTMENTS

### C-3-1 Adjustment of Spot Metering Position

\* After the replacement of the Eyepiece Ass'y, if performed, be sure to adjust the spot metering position.

[Adjustment procedure]

- 1) Remove the Shoe Contact Holder Setscrew (69114076) and take off the Shoe Contact Holder.
- 2) Remove the SPD Ass'y (1AEAE200).
- 3) Place the camera in position 10 to 15 cm away from an incandescent lamp so that the light from the lamp enters the hole in the Light Sensor Holder (1AE85100).
- 4) From front of the Body, look at the center of the Mirror. By turning the SPD Adjuster (eccentric pin), make adjustment so that the light from the incandescent lamp comes to the center of the Mirror (the light shines on the split image area of the Focusing Glass).

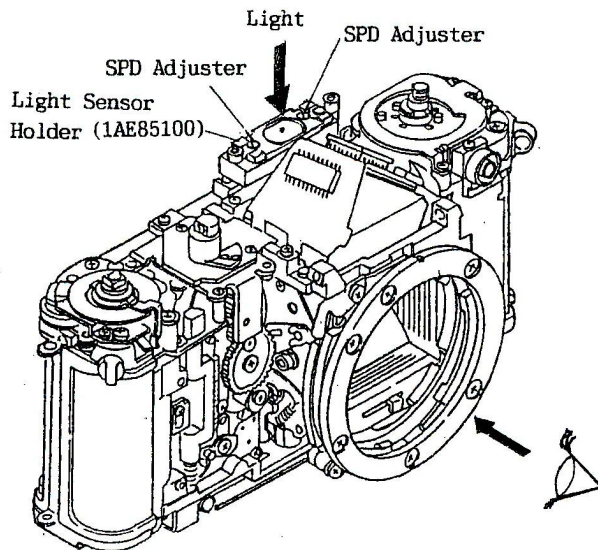


Fig.65

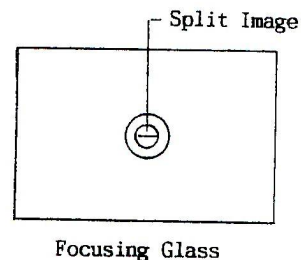


Fig.66

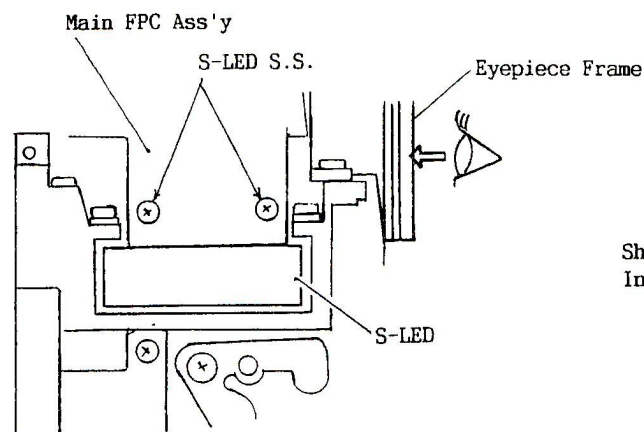


### C-3-2 Adjustment of Indicator Position in Viewfinder

\* Be sure to make this adjustment when reinstalling or replacing the Main FPC Ass'y.

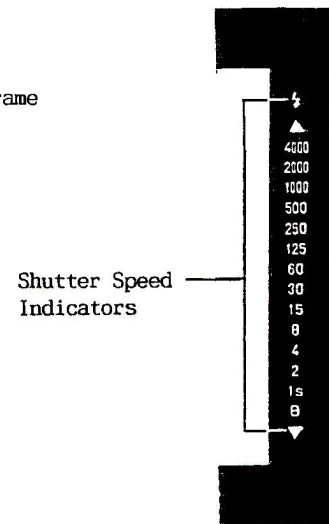
[Adjustment procedure]

- 1) Install the Main FPC Ass'y and connect the lead wires.
- 2) Do not install the ISO Turning Limit Plate or ISO Contact Base Ass'y.
- 3) Set two batteries (LR44) in the Battery Case.
- 4) Press the Release Shaft halfway down. (The power will be held for 16 sec.)
- 5) Place your eye at the center of the Eyepiece and adjust the position of the S-LED so that none of all the LEDs for "▽" "B" to "△" "  $\frac{1}{4}$  " are eclipsed.
- 6) Tighten up the two S-LED Setscrews.



(Right Side View of Mirror Box)

Fig.67



(Display in Viewfinder)

Fig.68

### C-3-3 Flange Back Adjustment

Distance from the lens mount surface to the rail surface on the film side:

45.42  $\pm$  0.02 mm

For adjustment, insert an appropriate washer between the body mount and the Mirror Box.

Adjusting washers: 0.05 mm (128666), 0.02 mm (128667)

Difference in level between the rail surface on the film side and that on the pressure plate side:

0.20  $\pm$  0.02 mm

### C-3-4 Adjustment of Finder Focusing

#### 1. Rough adjustment of finder focusing

Make adjustment by replacing the washer placed under the Penta Prism Holder. (See Fig.37)

- ① If the focus is not adjusted even when the focus ring is turned to the infinity position

⇒ The finder back is too long. Lower the focusing screen to shorten the finder back.

- ② If the focus is adjusted before the focus ring arrives at the infinity position

⇒ The finder back is too short. Raise the focusing screen to lengthen the finder back.

#### 2. Fine adjustment of finder focusing

When the focus is dislocated to such a degree that the indicator is positioned within  $\pm 1/4$  of the " $\infty$ " mark width (with the standard lens Planar 1.4/50 is dislocated by 0.1 mm or less), correct it by turning the Focus Adjusting Screw. (See Fig.70)

After adjustment by the Focus Adjusting Screw, be sure to operate the shutter several times and then check focusing again. And then lock the Focus Adjusting Screw with bond (C-551).

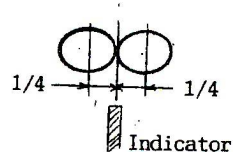


Fig.69

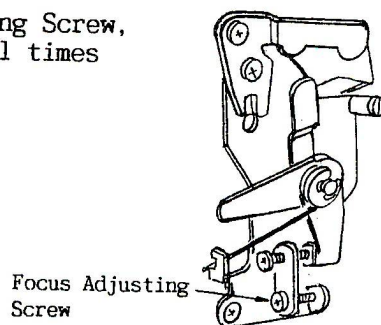


Fig.70

(ML Base Plate Ass'y)

### C-3-5 Adjustments of Shutter

\* The shutter speed, curtain travel speed and flash synchronization of the Shutter Unit mounted on the camera is adjusted before shipment. Also those of the Shutter Unit as a service part is already adjusted.

#### 1. Shutter speed

Table 1 Allowable range of manual exposure time (Unit: ms)

| Marking(S) | Allowable width (EV) | Allowable range |                 |             |
|------------|----------------------|-----------------|-----------------|-------------|
|            |                      | Upper limit     | Reference value | Lower limit |
| 1          | $\pm 0.4$            | 1320            | 1000            | 758         |
| 1/2        |                      | 660             | 500             | 379         |
| 1/4        |                      | 330             | 250             | 189         |
| 1/8        |                      | 165             | 125             | 94.8        |
| 1/15       |                      | 82.5            | 62.5            | 47.4        |
| 1/30       |                      | 41.23           | 31.25           | 23.68       |
| 1/60       |                      | 20.62           | 15.63           | 11.85       |
| 1/125      |                      | 10.31           | 7.813           | 5.921       |
| 1/250      | +0.5 -0.05           | 5.523           | 3.906           | 3.773       |
| 1/500      | $\pm 0.45$           | 2.667           | 1.953           | 1.429       |
| 1/1000     |                      | 1.334           | 0.977           | 0.715       |
| 1/2000     | $\pm 0.5$            | 0.690           | 0.488           | 0.345       |
| 1/4000     | $\pm 0.6$            | 0.369           | 0.244           | 0.160       |

#### 2. Curtain travel speed

◦ The first and second curtains must travel vertically the distance of 24 mm in about 24 ms.

#### 3. Flash synchronization

◦ Delay time

Sensing point of shutter tester: 21 mm "A" range: 0.4 ms or less

Measure at 1/250 sec shutter speed. "B" range: 1.0 ms or more

◦ Contact efficiency

70% or above for shutter speed of 1/250 sec or slower  
(Check with a 1 ms contact efficiency meter.)

### C-3-6 Voltage Adjustments of Main FPC Ass'y

\* The adjustments of offset, Vr and B1 level instructed below have been already performed for the Main FPC Ass'y supplied as a service part.

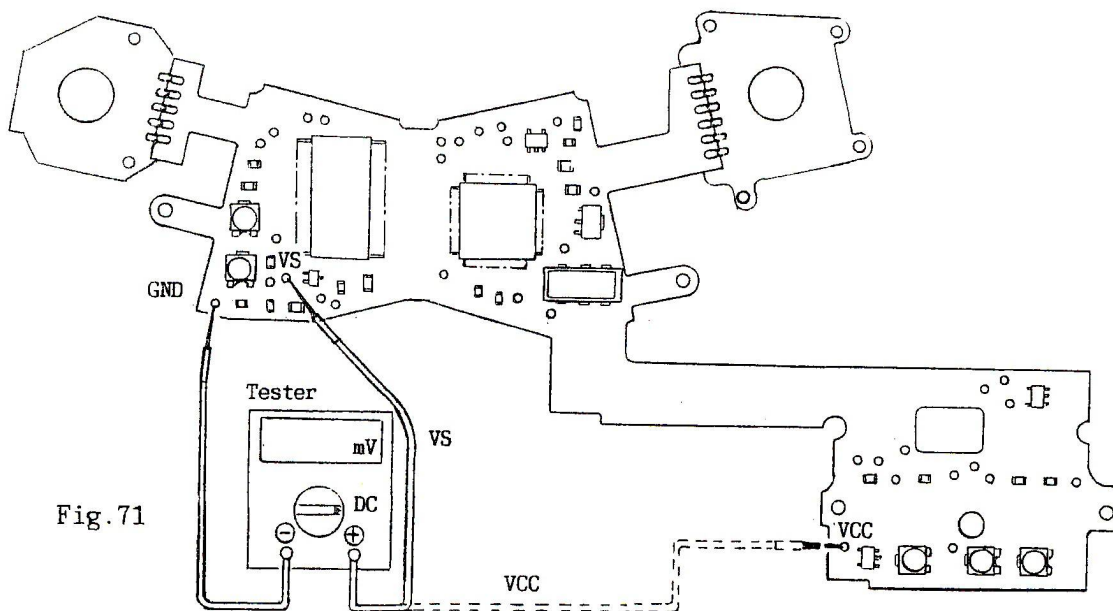
#### 1. Check of Vs

[Checking procedure]

- ① Connect 3V power supply.
- ② Turn ON the Check Switch for power-on (The power is held for 16 sec.)
- ③ Measure the voltage of Vcc.
- ④ Measure the voltage of Vs.
- ⑤ The voltage is normal when the value of Vcc-Vs is 1.4V (1.26 to 1.54V).

Note:

- a) Measure Vs and Vcc with GND as the reference.



#### 2. Adjustment of offset

[Adjustment procedure] (See Fig.72 and 73)

- ① Connect 3V power supply.
- ② Turn ON the Check Switch for power-on (The power is held for 16 sec.)
- ③ Set a high brightness (LV16 or above) so that sufficient photocurrent flows in the SPD. (See Fig.73)
- ④ Measure the voltage of Ph1.
- ⑤ Measure the voltage of Ph2.
- ⑥ Make adjustment by turning VR1 so that the value of Ph1-Ph2 becomes 0 to 7mV.

Note:

- a) The measurements of Ph1 and Ph2 must be performed under the same brightness and with GND as the reference.



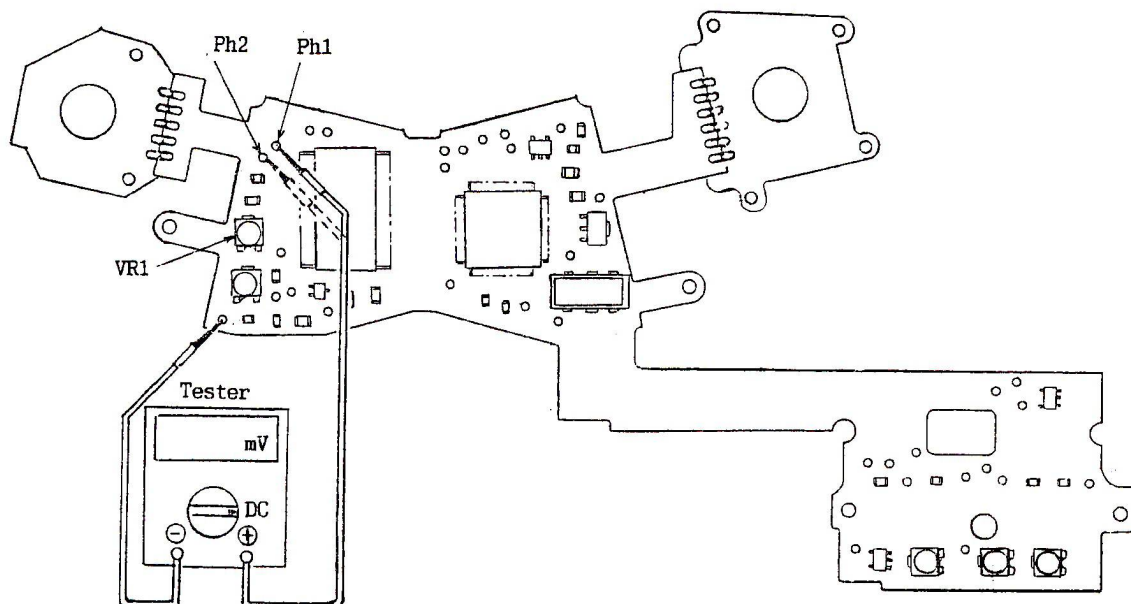


Fig.72

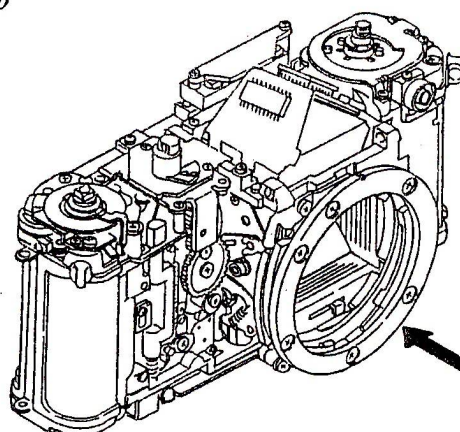


Fig.73

Light of LV16 or above

### 3. Adjustment of Vr (inclination of the output Vout against change in exposure)

[Adjustment procedure] (See Fig.74)

- ① Connect 3V power supply.
- ② Turn ON the Check Switch for power-on (The power is held for 16 sec.)
- ③ Measure the voltage of Vs.
- ④ Measure the voltage of Vr.
- ⑤ Make adjustment by turning VR2 so that the value of Vr-Vs becomes 288 mV.

Notes:

- a) Vr may be measured with Vs as the reference. For accurate measurement, however, both Vs and Vr should be measured with GND as the reference.
- b) The adjustment value of Vr varies with temperature as shown in Table 2. (288 mV at 25°C)

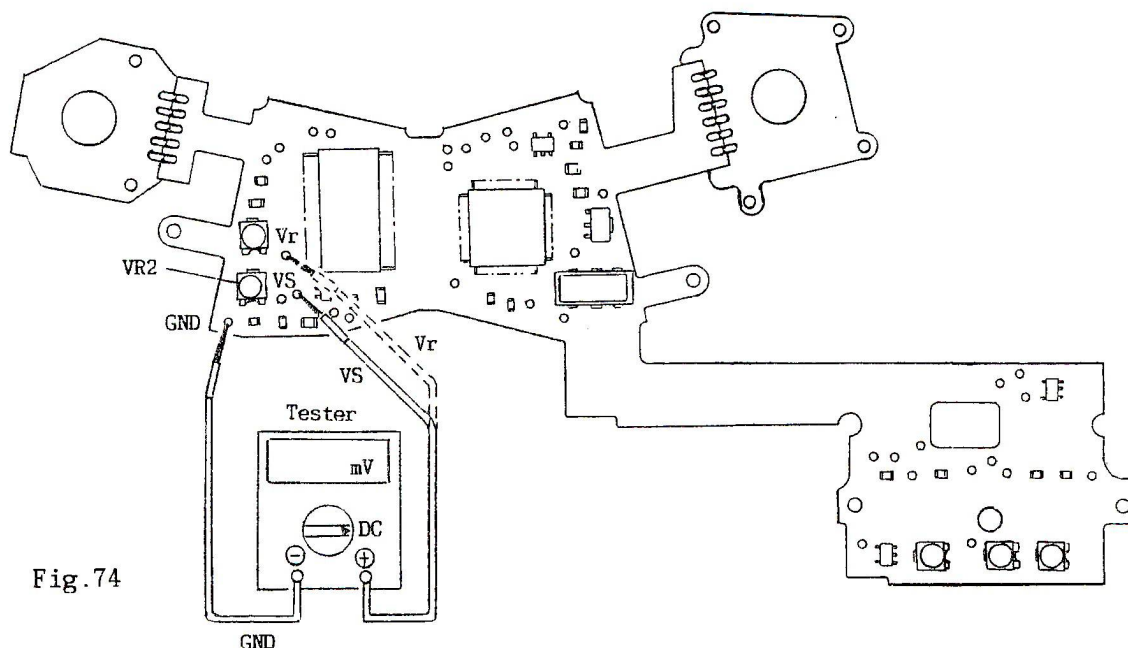


Fig. 74

Table 2 Relationship between aperture resistance and temperature

| Temperature ( °C) | Vr (mV) | Aperture resistance (mV) | Temperature ( °C) | Vr (mV) | Aperture resistance (mV) |
|-------------------|---------|--------------------------|-------------------|---------|--------------------------|
| 10                | 273.5   | 170.9                    | 21                | 284.1   | 177.6                    |
| 11                | 274.5   | 171.5                    | 22                | 285.1   | 178.2                    |
| 12                | 275.4   | 172.1                    | 23                | 286.1   | 178.8                    |
| 13                | 276.4   | 172.7                    | 24                | 287.0   | 179.4                    |
| 14                | 277.4   | 173.3                    | 25                | 288.0   | 180.0                    |
| 15                | 278.3   | 174.0                    | 26                | 289.0   | 180.6                    |
| 16                | 279.3   | 174.6                    | 27                | 289.9   | 181.2                    |
| 17                | 280.3   | 175.2                    | 28                | 290.9   | 181.8                    |
| 18                | 281.2   | 175.8                    | 29                | 291.9   | 182.4                    |
| 19                | 282.2   | 176.4                    | 30                | 292.9   | 183.0                    |
| 20                | 283.2   | 177.0                    |                   |         |                          |

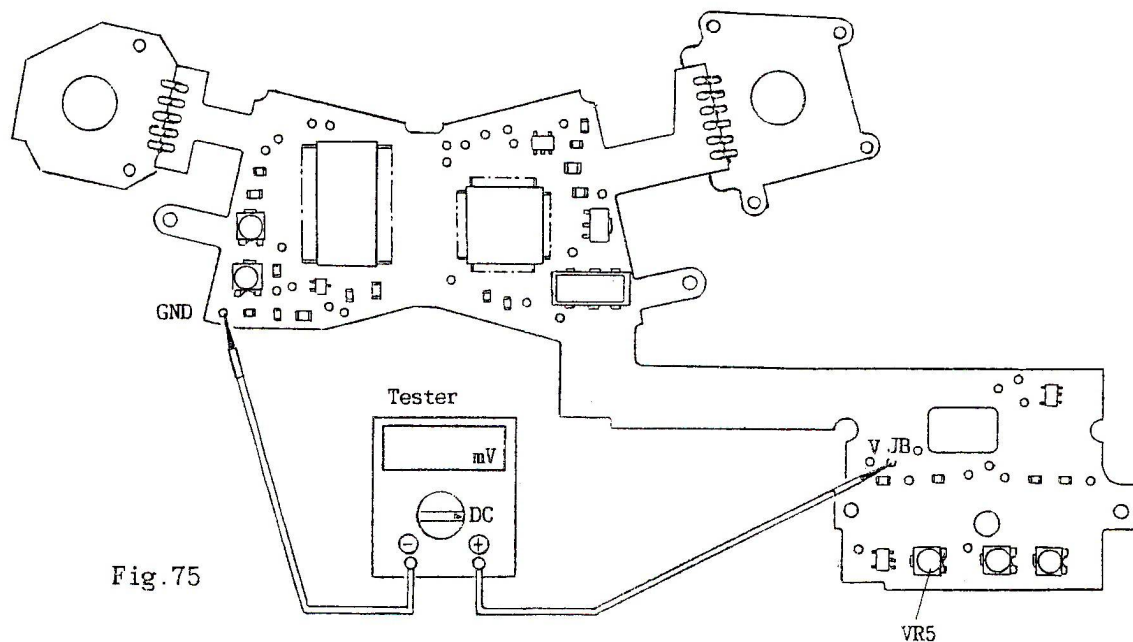
#### 4. Adjustment of B1 level (battery check)

[Adjustment procedure] (See Fig. 75)

- ① Connect 2.5V power supply.
- ② Turn ON the Check Switch for power-on (The power is held for 16 sec.)
- ③ Measure the voltage of Vs.
- ④ Adjust VR5 so that the voltage of VJB becomes equal to Vs.
- ⑤ Set the power supply to 2.45V and turn OFF the power to the camera once (turn ON and then OFF the Shutter Release Switch and wait until power hold comes to an end in 16 seconds). Then turn ON the Check Switch again and make sure that the display in the viewfinder is blinking at 1 Hz.

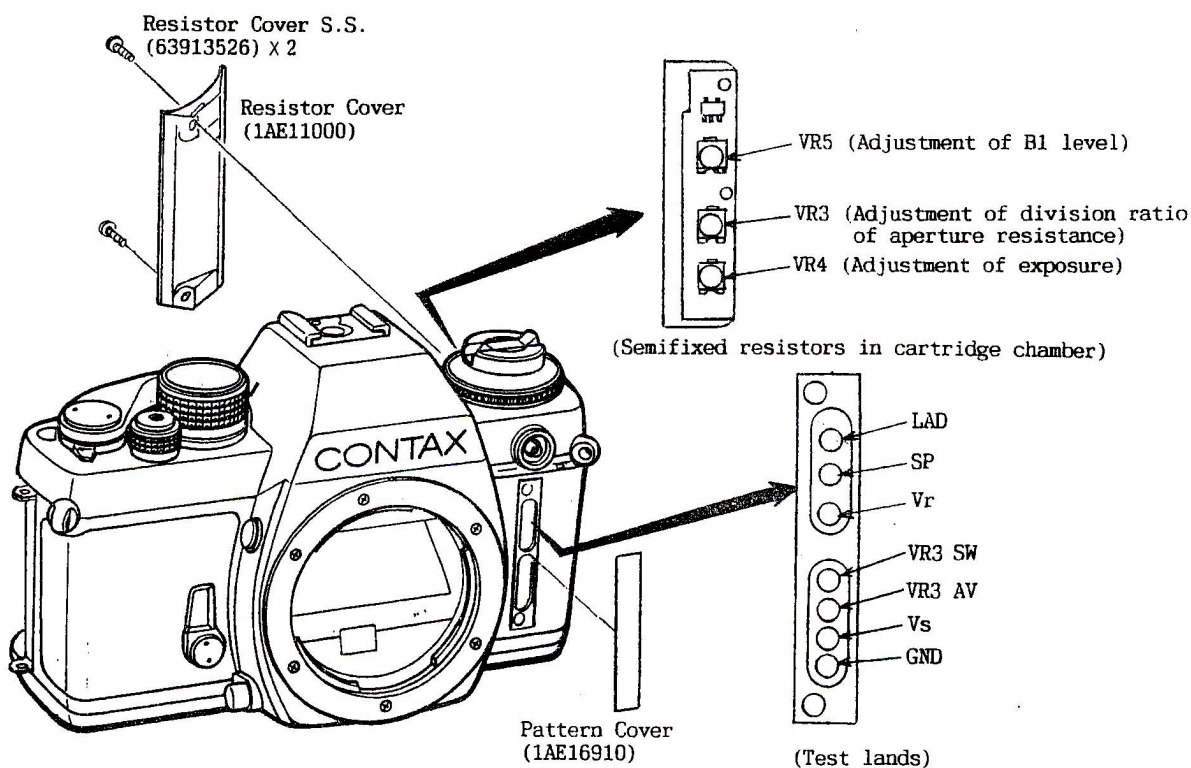
#### Note:

- a) Remove the Top Cover when performing the adjustments 1 to 4 above.



Note:

- a) Perform the adjustments 5 and 6 below with the exterior parts installed. Peel off the Leather (Left) (1AE18900) and Pattern Cover (1AE16910). Also remove the Resistor Cover (1AE11000) from the cartridge chamber. And make adjustment by means of the test lands inside the Pattern Cover and the semifixed resistors inside the Resistor Cover.



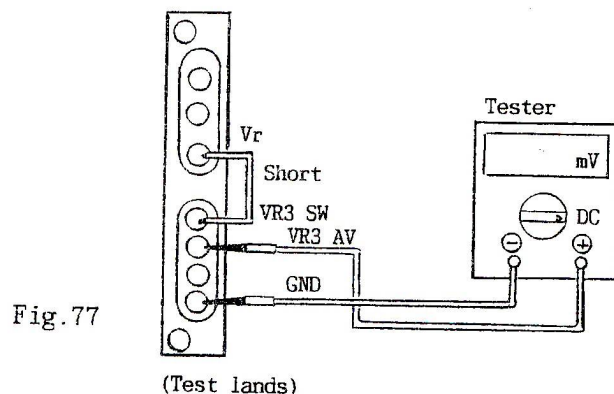
## 5. Adjustment of division ratio of aperture resistance

[Adjustment procedure] (See Fig.77)

- ① Connect 3V power supply.
- ② Turn ON the Check Switch for power-on (The power is held for 16 sec.)
- ③ Short the input and the output of the Analog Switch.  
(Short the Vr and the VR3 Switch on the test lands.)
- ④ Make an adjustment with the semifixed resistance VR3 so that VR3AV of the test land becomes 180mV.

Note:

- a) This adjustment value varies with temperature as shown in Table 2.  
(180 mV at 25°C)



## 6. Adjustment of exposure (shift)

[Adjustment procedure]

- ① Set the ISO Dial of the camera to "80".
- ② Set the EE tester to K: 1.3 .
- ③ Connect 3V power supply.
- ④ Turn ON the Check Switch for power-on (The power is held for 16 sec.)
- ⑤ Mount the standard lens (Planar 50 mm/F1.4) and set the focus ring in the infinity position and the aperture to F5.6 .
- ⑥ Set the brightness of the EE tester to LV12 and set the camera on the EE tester.
- ⑦ Make adjustment by turning the semifixed resistor VR4 so that the indicator in the viewfinder lights up at "125" only.
- ⑧ Set the brightness of the EE tester to LV8 and make sure that the indicator in the viewfinder lights up at "8" only.
- ⑨ Set the brightness of the EE tester to LV15 and make sure that the indicator in the viewfinder lights up at "1000" only.



[Exposure meter]

The value determined from a combination of aperture and brightness values as shown in Table 3 lights up to indicate exposure.

Table 3

| Aperture value | LV   | 4    | 5   | 6    | 7     | 8     | 9      | 10      | 11      | 12       | 13        | 14        | 15 |
|----------------|------|------|-----|------|-------|-------|--------|---------|---------|----------|-----------|-----------|----|
| 1.4            | 8    | 15   | 30  | 60   | 125   | 250   | 500    | 1000    | 2000    | 4000     | ▲         | ▲         |    |
| 2.0            | 4    | 8    | 15  | 30   | 60    | 125   | 250    | 500     | 1000    | 2000     | 4000      | ▲         |    |
| 2.8            | 2    | 4    | 8   | 15   | 30    | 60    | 125    | 250     | 500     | 1000     | 2000      | 4000      |    |
| 3.5            | 2.1S | 4.2  | 8.4 | 15.8 | 30.15 | 60.30 | 125.60 | 250.125 | 500.250 | 1000.500 | 2000.1000 | 4000.2000 |    |
| 4.0            | 1S   | 2    | 4   | 8    | 15    | 30    | 60     | 125     | 250     | 500      | 1000      | 2000      |    |
| 4.5            | ▼    | 2.1S | 4.2 | 8.4  | 15.8  | 30.15 | 60.30  | 125.60  | 250.125 | 500.250  | 1000.500  | 2000.1000 |    |
| 5.6            | ▼    | 1S   | 2   | 4    | 8     | 15    | 30     | 60      | 125     | 250      | 500       | 1000      |    |
| 8.0            | ▼    | ▼    | 1S  | 2    | 4     | 8     | 15     | 30      | 60      | 125      | 250       | 500       |    |
| 11.0           | ▼    | ▼    | ▼   | 1S   | 2     | 4     | 8      | 15      | 30      | 60       | 125       | 250       |    |
| 16.0           | ▼    | ▼    | ▼   | ▼    | 1S    | 2     | 4      | 8       | 15      | 30       | 60        | 125       |    |
| 22.0           | ▼    | ▼    | ▼   | ▼    | ▼     | 1S    | 2      | 4       | 8       | 15       | 30        | 60        |    |

Overexposure warning : " ▲ " blinking at 2 Hz

K value = 1.3  
ISO = 80

Underexposure warning: " ▼ " blinking at 2 Hz

#### C-4 OTHERS

##### C-4-1 Current Consumption

When indicator in viewfinder is not lighting : 5  $\mu$ A or less

When indicator in viewfinder is lighting : 15 mA or less

##### C-4-2 Battery Voltage

3.0V

{ Normal indication

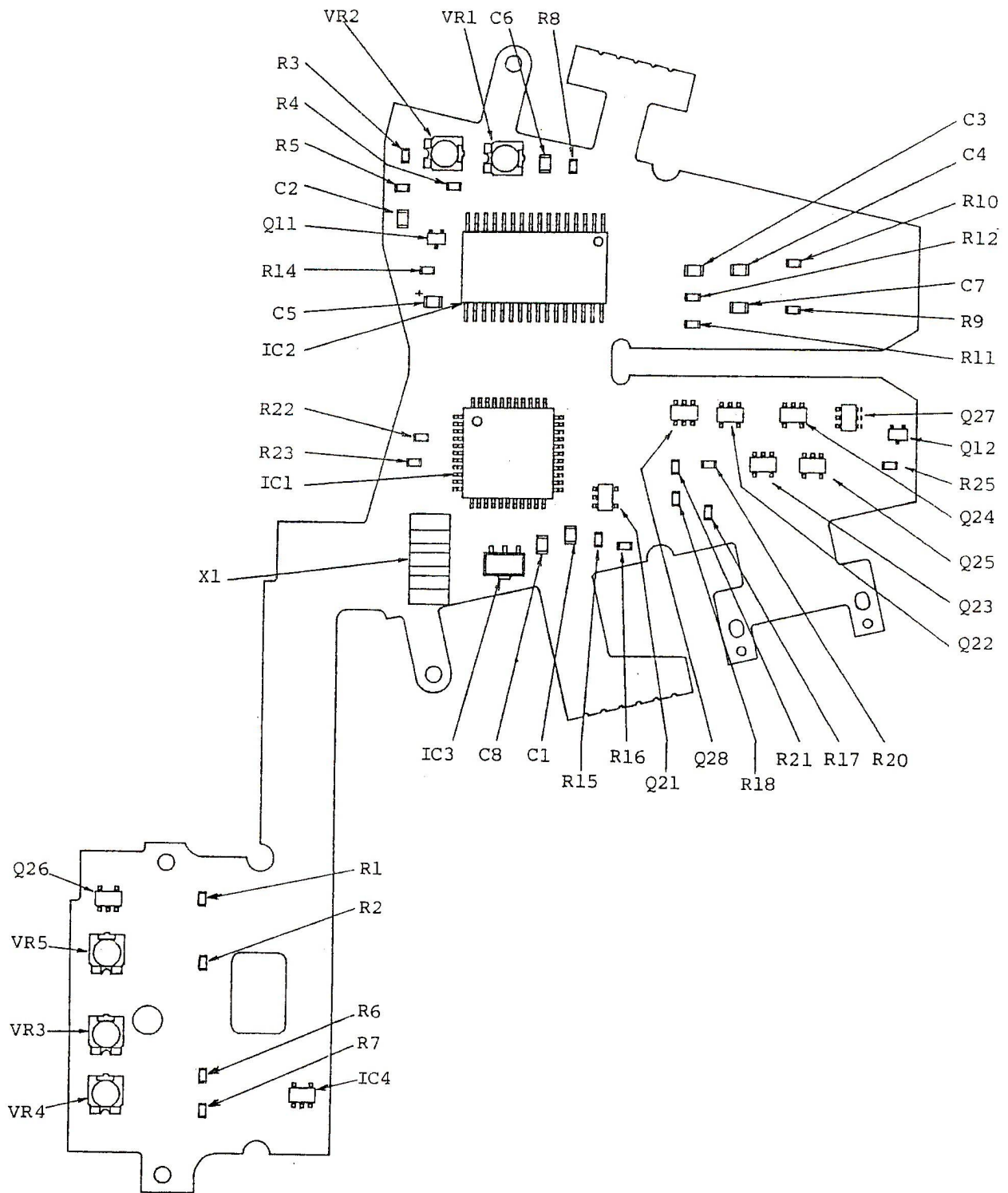
2.5V

{ Warning (Indicator in viewfinder blinking at 1 Hz)

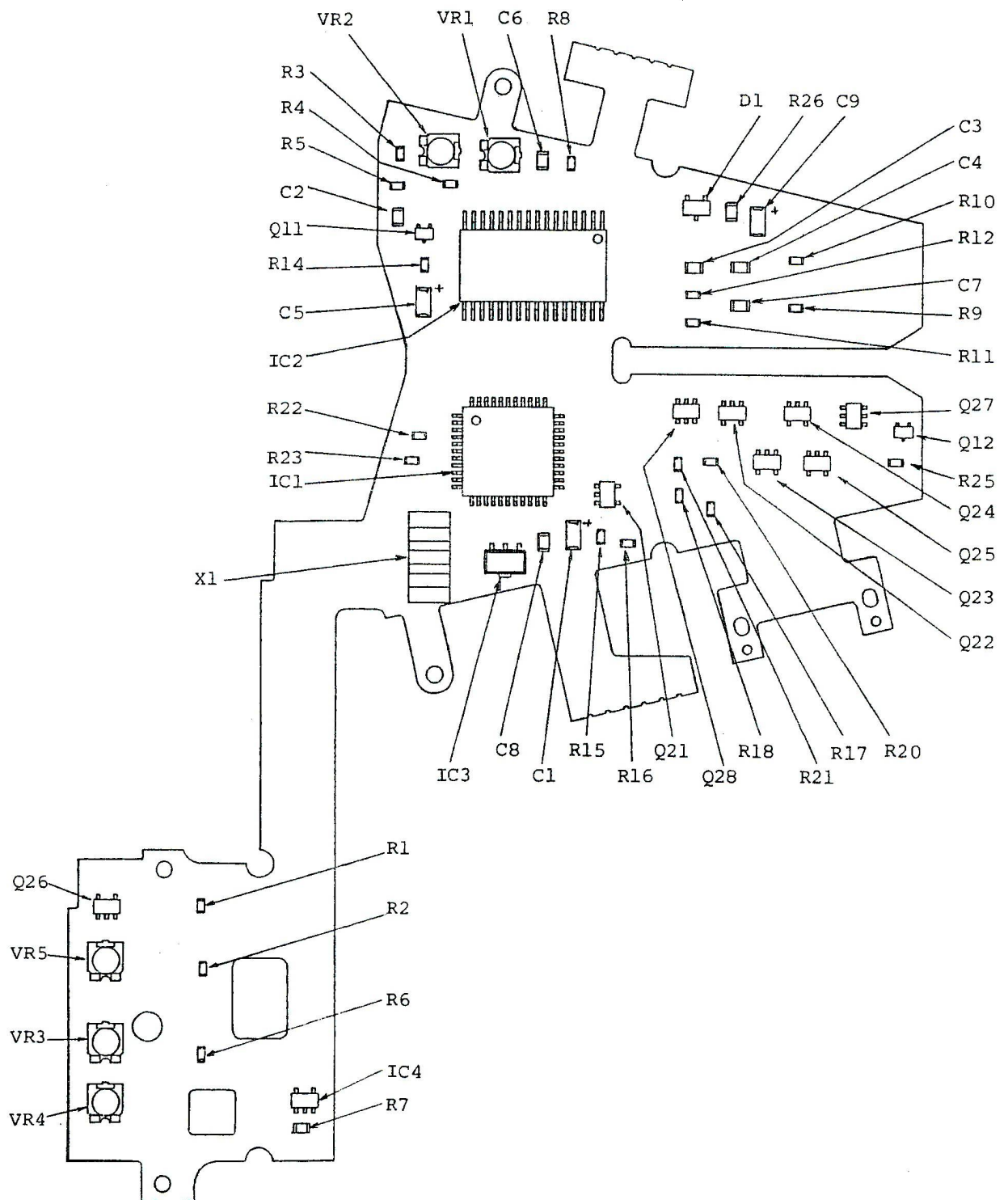
2.4V

All functions in viewfinder stop at 2.4V or below.

# Electric Parts on Old Main FPC



# Electric Parts on New Main FPC



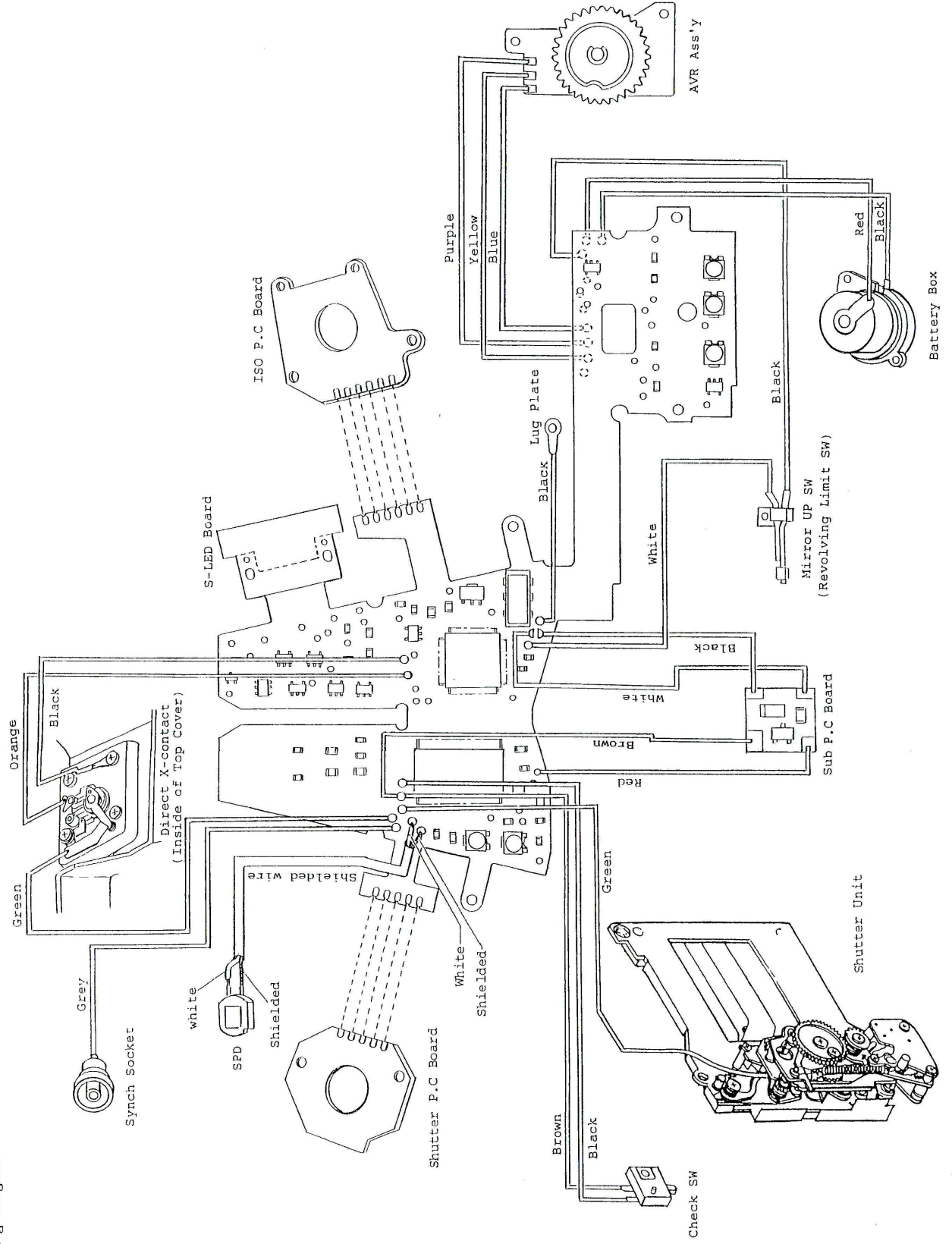
This diagram is an exploded view of a mechanical assembly, likely a motor or pump unit. It shows the following components and their assembly sequence:

- Top Cover (1):** The main upper housing with mounting holes (2, 3, 4, 5, 6, 7, 8, 9, 10, 11) and a central opening (12).
- Internal Components (13-17):** A series of small parts, possibly seals or spacers, that fit into the top cover.
- Motor Assembly (18-28):** The central motor unit, including the stator (18), rotor (19), and various internal parts (20-27) that form the motor housing.
- Base Mounting (29-38):** The bottom housing or base plate, which includes mounting feet (29, 30, 31, 32, 33, 34, 35, 36, 37, 38) and internal structural parts.
- Internal Components (39-47):** A series of small parts, possibly seals or spacers, that fit into the base mounting.
- Motor Assembly (48-58):** The lower motor unit, including the stator (48), rotor (49), and various internal parts (50-57) that form the motor housing.

Note: No.8 is a missing number on the New Main FPC.



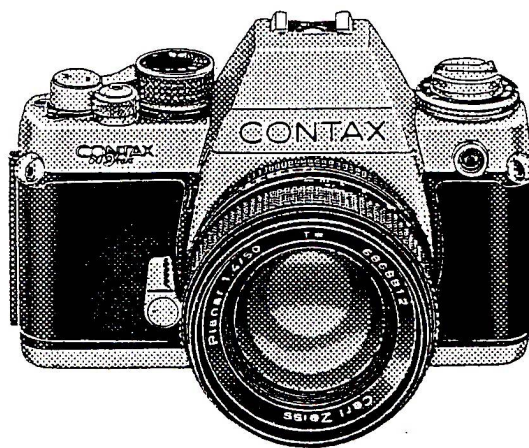
Wiring Diagram

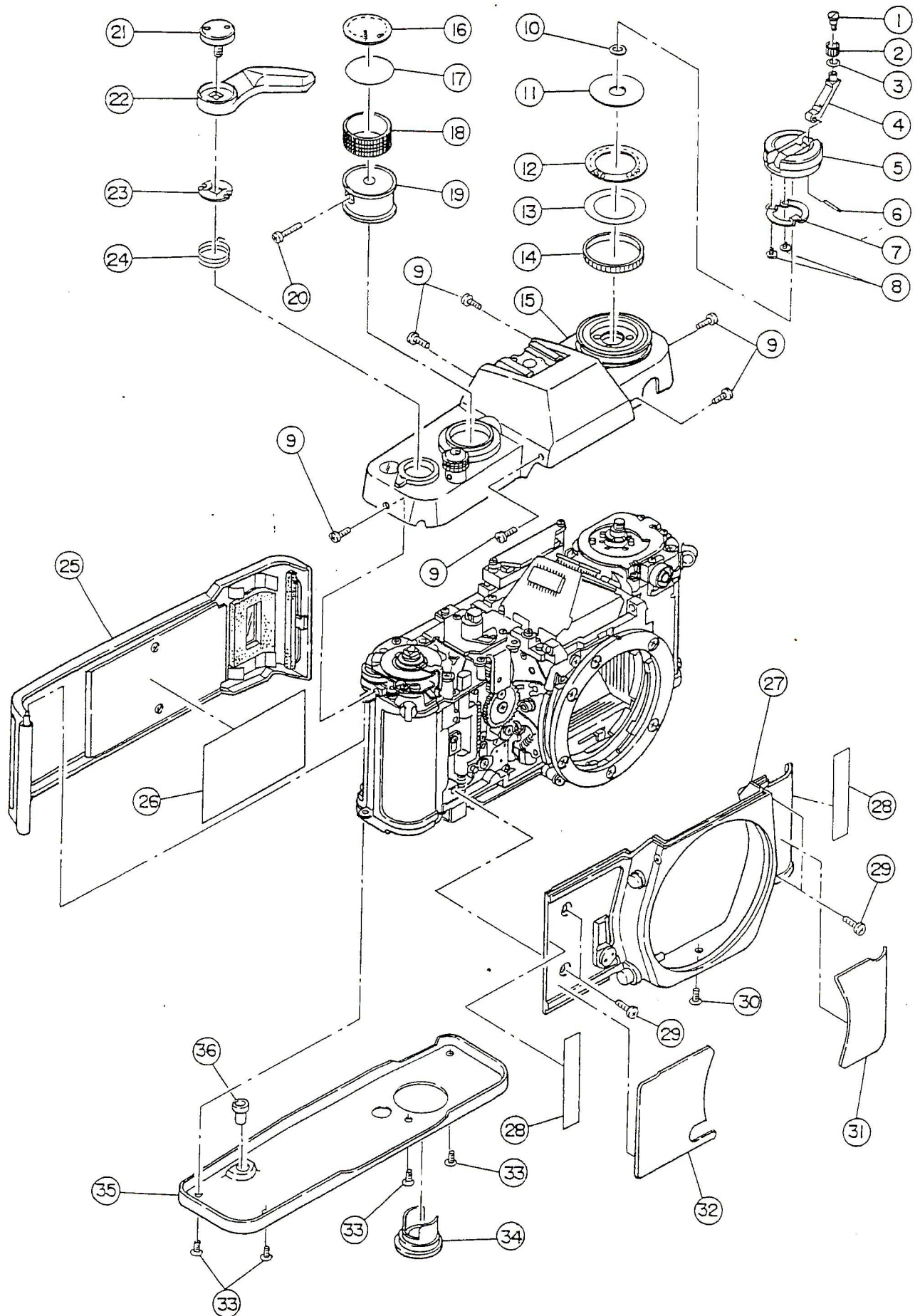




# CONTAX S2

## ASSEMBLING CHART



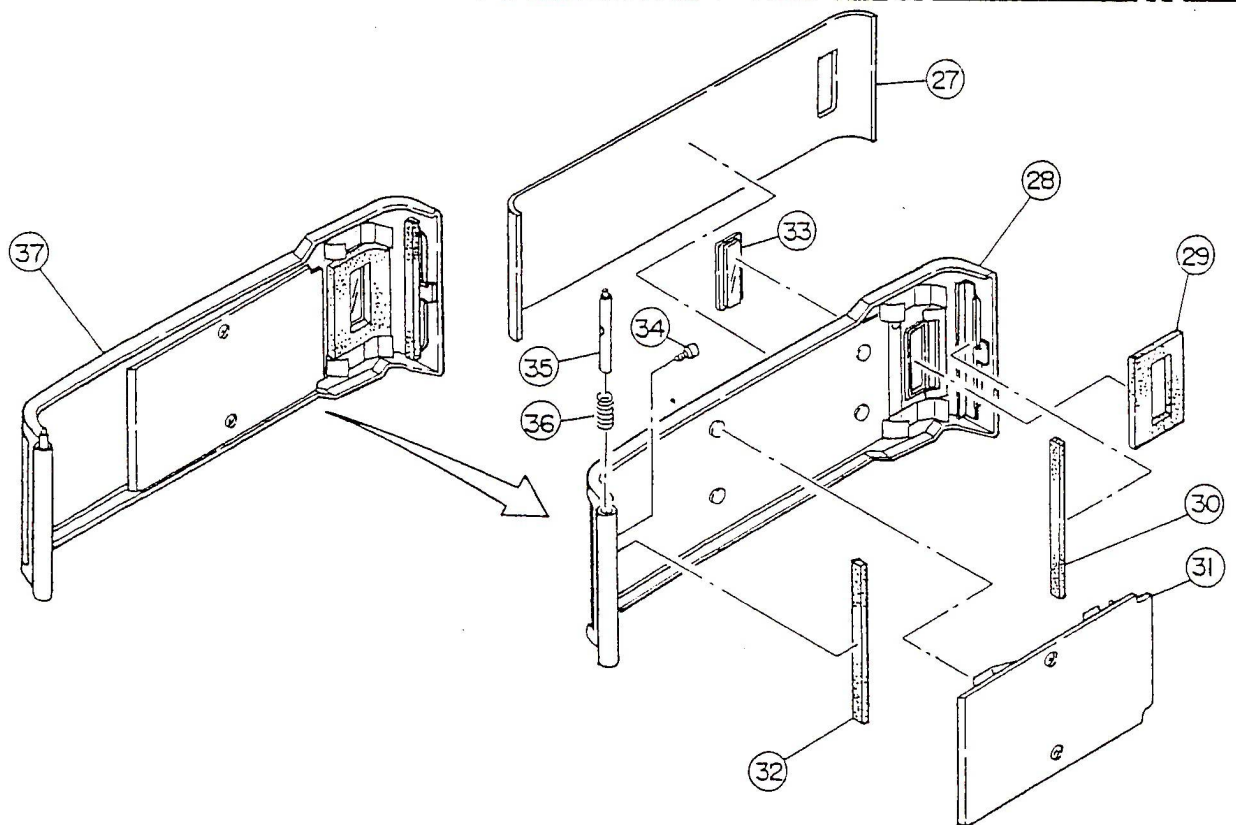
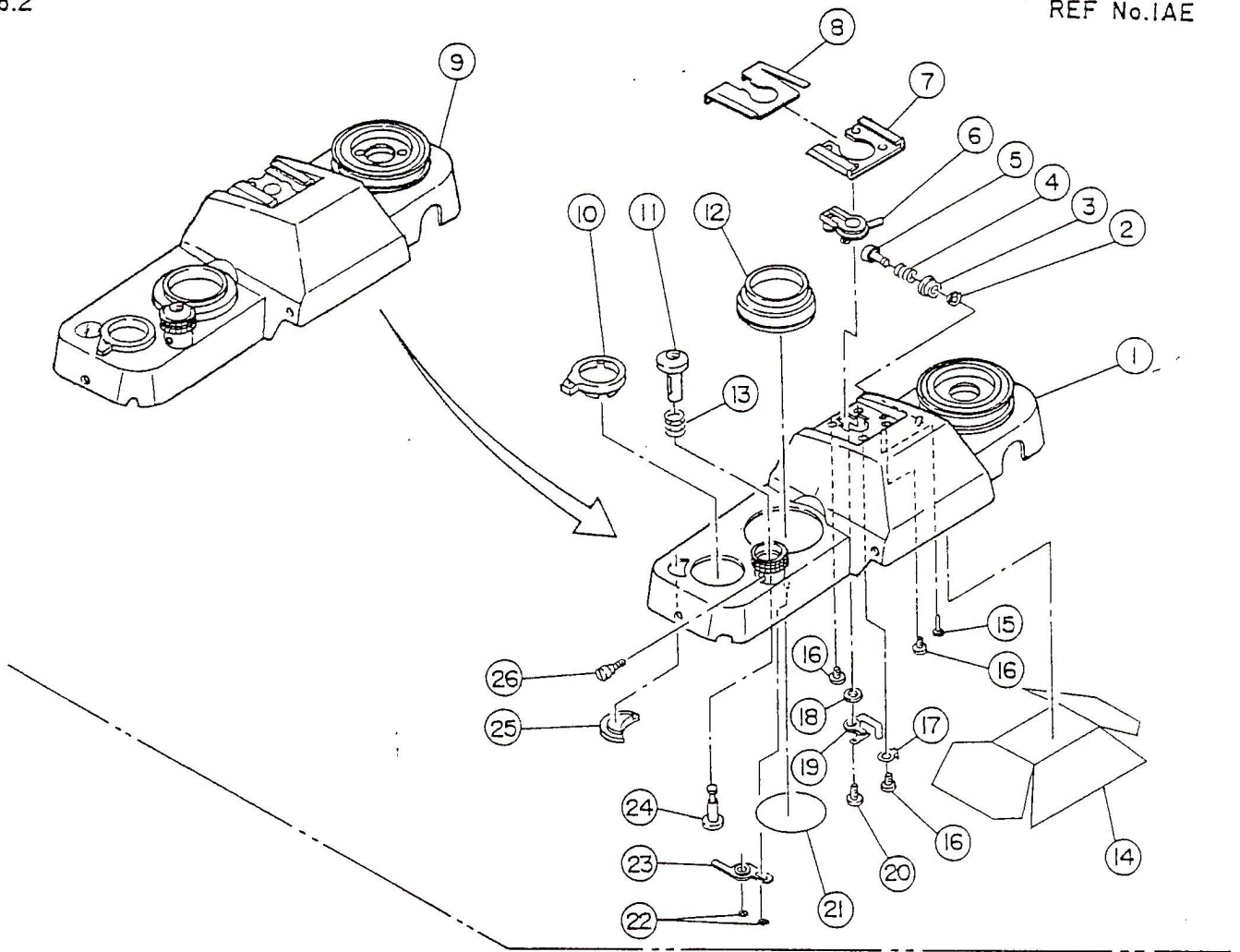


| PARTS NO.    | DESCRIPTION                   | Q'TY |
|--------------|-------------------------------|------|
| 1 1AE43300   | CRANK KNOB SCREW              | 1    |
| 2 1AE43200   | CRANK KNOB                    | 1    |
| 3 60141812   | WASHER                        | 1    |
| 4 1AE43111   | CRANK ARM                     | 1    |
| 5 1AE43011   | REWIND KNOB                   | 1    |
| 6 66670830   | CRANK ARM PIN                 | 1    |
| 7 13937312   | CRANK ARM SPRING              | 1    |
| 8 61912522   | CRANK ARM SPRING S.S          | 2    |
| 9 61913022   | TOP COVER S.S                 | 6    |
| 10 60253112  | WASHER                        | 1    |
| 11 1AE32620  | SEAL RUBBER                   | 1    |
| 12 1AE40500  | ISO NAME PLATE                | 1    |
| 13 1AE40600  | ISO ADHESIVE TAPE             | 1    |
| 14 1AE41600  | ISO DIAL RUBBER               | 1    |
| 15 1AEAA230  | TOP COVER ASS'Y               | 1    |
| 1AEAA230M    | TOP COVER ASS'Y (60 ANV)      | 1    |
| 16 1AE32400  | S. DIAL NAME PLATE            | 1    |
| 17 1AE33800  | S. ADHESIVE TAPE              | 1    |
| 18 1AE32500  | S. DIAL RUBBER                | 1    |
| 19 1AE32320  | S. DIAL                       | 1    |
| 20 66001160  | S. DIAL S.S                   | 1    |
| 21 1AE63110  | W. LEVER S.S                  | 1    |
| 22 1AE63000  | W. LEVER                      | 1    |
| 23 1AE63400  | W. LEVER SPRING PLATE         | 1    |
| 24 1AE63310  | W. LEVER SPRING               | 1    |
| 25 *         | BACK COVER ASS'Y (See Page 2) | 1    |
| 26 16914500  | PRESSURE PLATE SHEET          | 1    |
| 27 *         | FRONT BASE ASS'Y (See Page 7) | 1    |
| 28 1AE17200  | FRONT BASE TAPE               | 2    |
| 29 61914026  | FRONT BASE S.S                | 4    |
| 30 61819526  | FRONT BASE S.S                | 1    |
| 31 1AE18800  | FRONT LEATHER (RIGHT)         | 1    |
| 32 1AE18900  | FRONT LEATHER (LEFT)          | 1    |
| 33 61812522  | BOTTOM COVER S.S              | 4    |
| 34 1AEAA200  | BATTERY CAP ASS'Y             | 1    |
| 35 1AE16020  | BOTTOM COVER                  | 1    |
| 36 1AE61520  | SPROCKET BUTTON               | 1    |
| 1-8 1AEAA510 | REWIND KNOB ASS'Y             | 1    |

Note : Parts marked \* are not available.

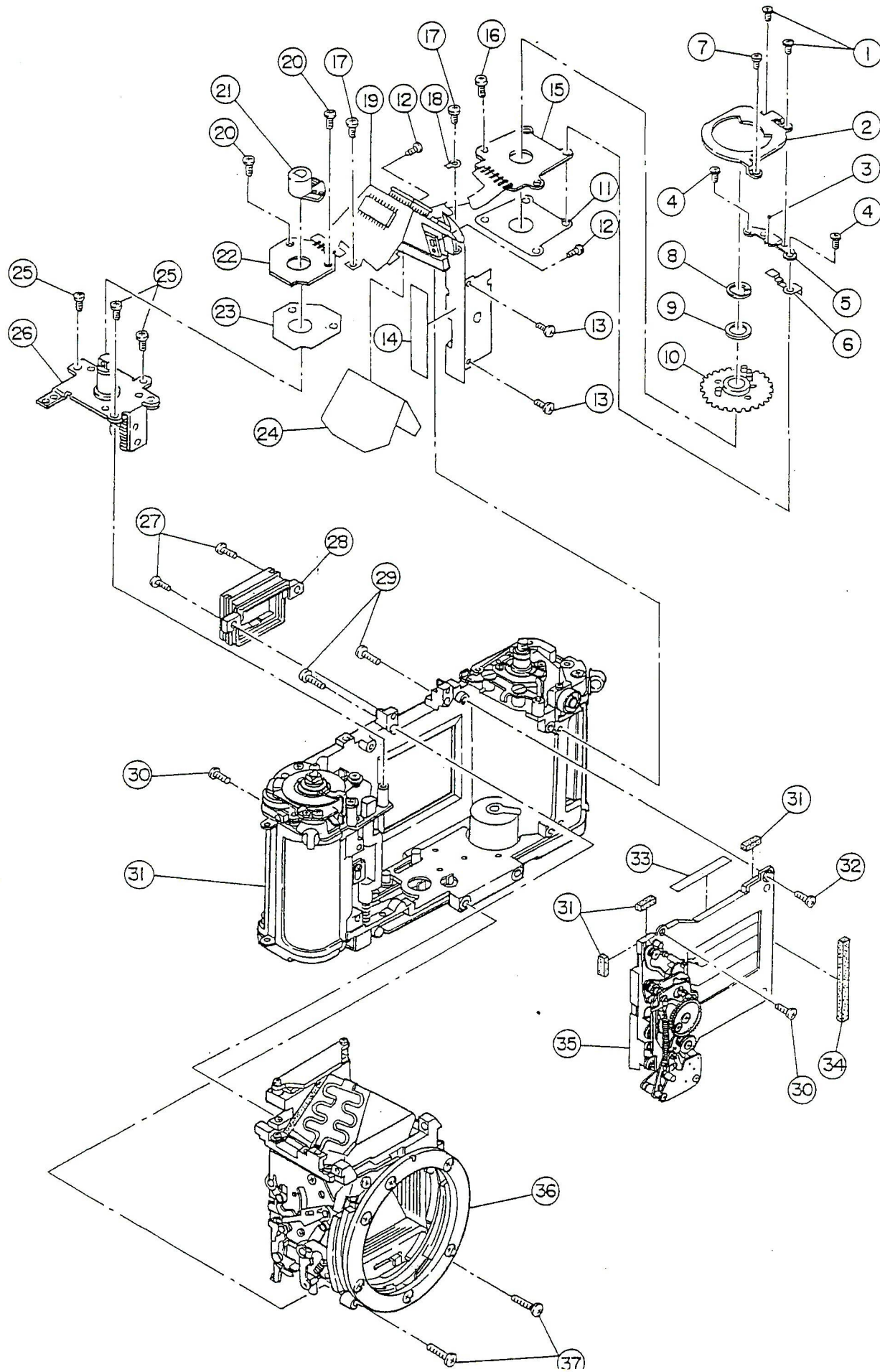
Note : The Item No.28 is used to mend the difference of height between the Front Base and the leather surface of the Body.





| PARTS NO.             | DESCRIPTION                     | Q'TY |
|-----------------------|---------------------------------|------|
| 1 *                   | TOP COVER                       | 1    |
| 2 66101222            | E RING (E-12)                   | 1    |
| 3 1AE15300            | ISO LOCK BUTTON HOLDER          | 1    |
| 4 13919200            | S. LOCK BUTTON SPRING           | 1    |
| 5 1AE15400            | ISO LOCK BUTTON                 | 1    |
| 6 1AEAA500            | SHOE CONTACT ASS'Y              | 1    |
| 7 13916901            | ACCESSORY SHOE                  | 1    |
| 8 13917800            | SHOE PLATE SPRING               | 1    |
| 9 1AEAA230            | TOP COVER ASS'Y                 | 1    |
| 1AEAA230M             | TOP COVER ASS'Y (60 ANV)        | 1    |
| 10 15966310           | ME LEVER                        | 1    |
| 11 1AE33030           | RELEASE BUTTON                  | 1    |
| 12 1AE32700           | S. DIAL PROTECTOR               | 1    |
| 13 1AE33700           | RELEASE BUTTON SPRING           | 1    |
| 14 1AE15700           | TOP COVER INSULATION SHEET      | 1    |
| 15 1AA87200           | SHOE CONTACT PLATE PIN          | 1    |
| 16 61911822           | ACCESSORY SHOE S.S              | 3    |
| 17 14716300           | SHOE LUG PLATE                  | 1    |
| 18 60152112           | WASHER                          | 1    |
| 19 17423000           | SHOE CONTACT PLATE (1) ASS'Y    | 1    |
| 20 61913026           | ACCESSORY SHOE S.S              | 1    |
| 21 1AE32800           | S. D. PROTECTOR SPRING          | 1    |
| 22 66100825           | E RING (E-8)                    | 2    |
| 23 1AEAA550           | RELEASE STOPPER ASS'Y           | 1    |
| 24 1AE33100           | RELEASE PIN                     | 1    |
| 25 1AE15200           | COUNTER WINDOW                  | 1    |
| 26 1AE32920           | RELEASE PIN S.S                 | 1    |
| 27 1AE13300           | BACK COVER LEATHER              | 1    |
| 28 *                  | BACK COVER                      | 1    |
| 29 17417240           | FILM CARTRIDGE MOQUETTE         | 1    |
| 30 13912901           | BACK COVER LIGHT-PROOF MOQUETTE | 1    |
| 31 1AEAA410           | PRESSURE PLATE ASS'Y            | 1    |
| 32 13912801           | BACK COVER MOQUETTE             | 1    |
| 33 1AE13600           | FILM CARTRIDGE WINDOW           | 1    |
| 34 13113210           | HINGE SHAFT STOPPER             | 1    |
| 35 13113000           | HINGE SHAFT (1)                 | 1    |
| 36 17417700           | HINGE SHAFT SPRING              | 1    |
| 37 *                  | BACK COVER ASS'Y                | 1    |
| 27-30, 32-36 1AEAA210 | BACK COVER ASS'Y                | 1    |

Note : Parts marked \* are not available.

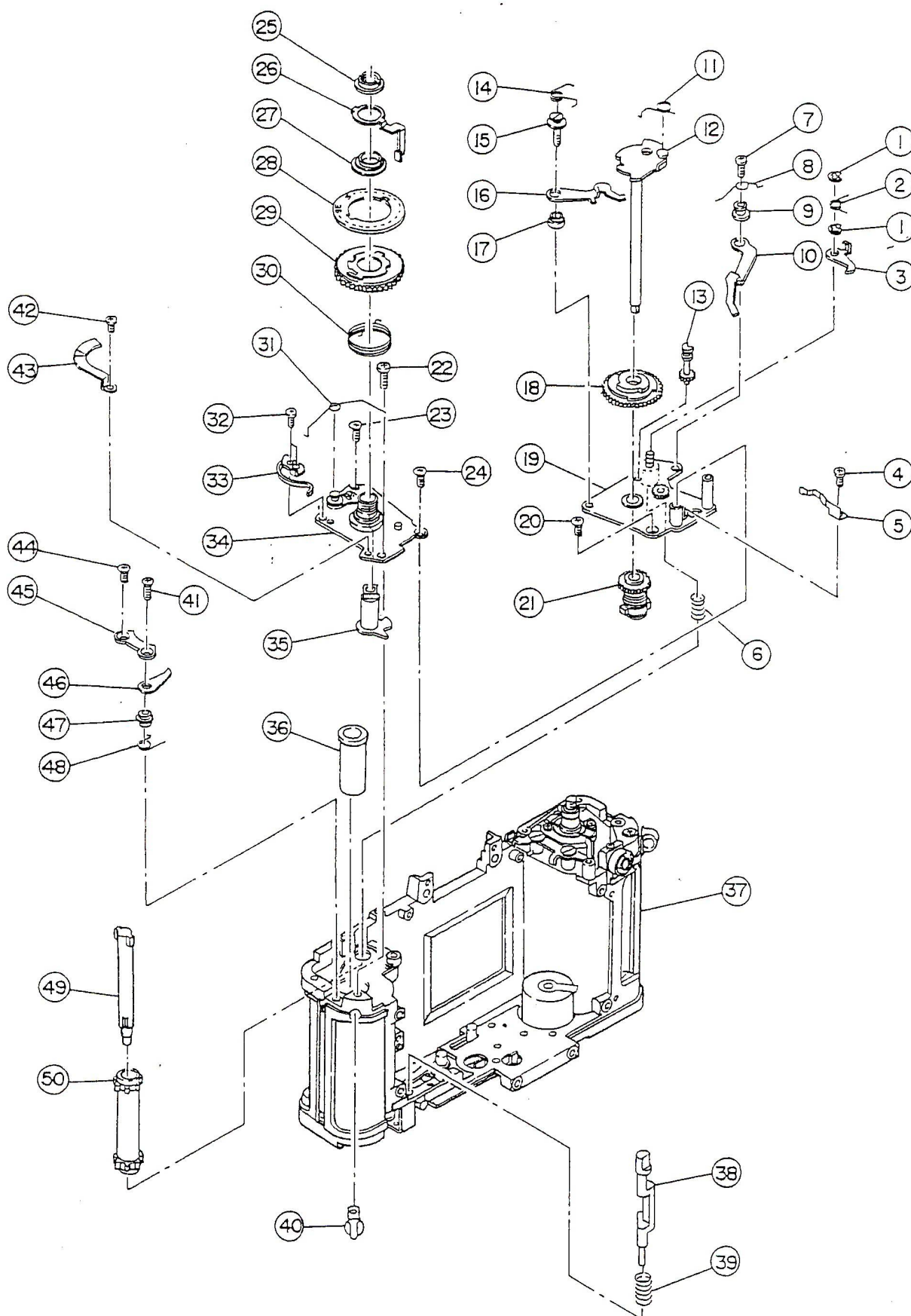


|    | PARTS NO. | DESCRIPTION                 | Q'TY |
|----|-----------|-----------------------------|------|
| 1  | 61911526  | ISO TURNING LIMIT PLATE S.S | 2    |
| 2  | 1AE42300  | ISO TURNING LIMIT PLATE     | 1    |
| 3  | 66701220  | STEEL BALL (ø1.2)           | 1    |
| 4  | 61912526  | BALL HOLDER S.S             | 2    |
| 5  | 1AE42100  | BALL HOLDER                 | 1    |
| 6  | 1AE42200  | ISO CLICK SPRING            | 1    |
| 7  | 61912526  | ISO TURNING LIMIT PLATE S.S | 1    |
| 8  | 66150625  | CE SNAP RING                | 1    |
| 9  | 60156110  | WASHER                      | 1    |
| 10 | 1AEAA390  | ISO CONTACT BASE ASS'Y      | 1    |
| 11 | 1AE51600  | ISO INSULATION SHEET        | 1    |
| 12 | 66001163  | S-LED S.S                   | 2    |
| 13 | 61911526  | MAIN FPC S.S                | 2    |
| 14 | 1AE50300  | FPC INSULATION SHEET        | 1    |
| 15 | 1AE51520  | ISO CODE BOARD              | 1    |
| 16 | 61912526  | ISO CODE BOARD S.S          | 1    |
| 17 | 63913026  | MAIN FPC S.S                | 2    |
| 18 | 14716300  | LUG PLATE                   | 1    |
| 19 | 1AEAE000  | MAIN FPC ASS'Y              | 1    |
| 20 | 61812522  | S. DIAL PC BOARD S.S        | 2    |
| 21 | 1AEAA220  | S. CONTACT BASE ASS'Y       | 1    |
| 22 | 1AE51410  | S. DIAL PC BOARD            | 1    |
| 23 | 1AE30300  | S. INSULATION SHEET         | 1    |
| 24 | 17484210  | PENTA PRISM COVER           | 1    |
| 25 | 61912222  | S. DIAL BASE PLATE S.S      | 3    |
| 26 | 1AEAA250  | S. DIAL BASE PLATE ASS'Y    | 1    |
| 27 | 66001122  | EYE-PIECE FRAME S.S         | 2    |
| 28 | 17425500  | EYE-PIECE FRAME             | 1    |
| 29 | 61927026  | MIRROR BOX S.S              | 2    |
| 30 | 61924026  | SHUTTER UNIT S.S            | 2    |
| 31 | 1AE10200  | BODY MOQUETTE (A)           | 3    |
| 32 | 66001043  | SHUTTER UNIT S.S            | 1    |
| 33 | 1AE20500  | EYE-PIECE LIGHT-PROOF SHEET | 1    |
| 34 | 17417300  | LOCK CLAW MOQUETTE          | 1    |
| 35 | 1AE20100  | SHUTTER UNIT                | 1    |
| 36 | *         | MIRROR BOX (See Page 8.9)   | 1    |
| 37 | 63929026  | MIRROR BOX S.S              | 2    |

Note : Parts marked \* is not available.

Note : The item No.18 cannot be used when the pattern of the Main FPC is changed.

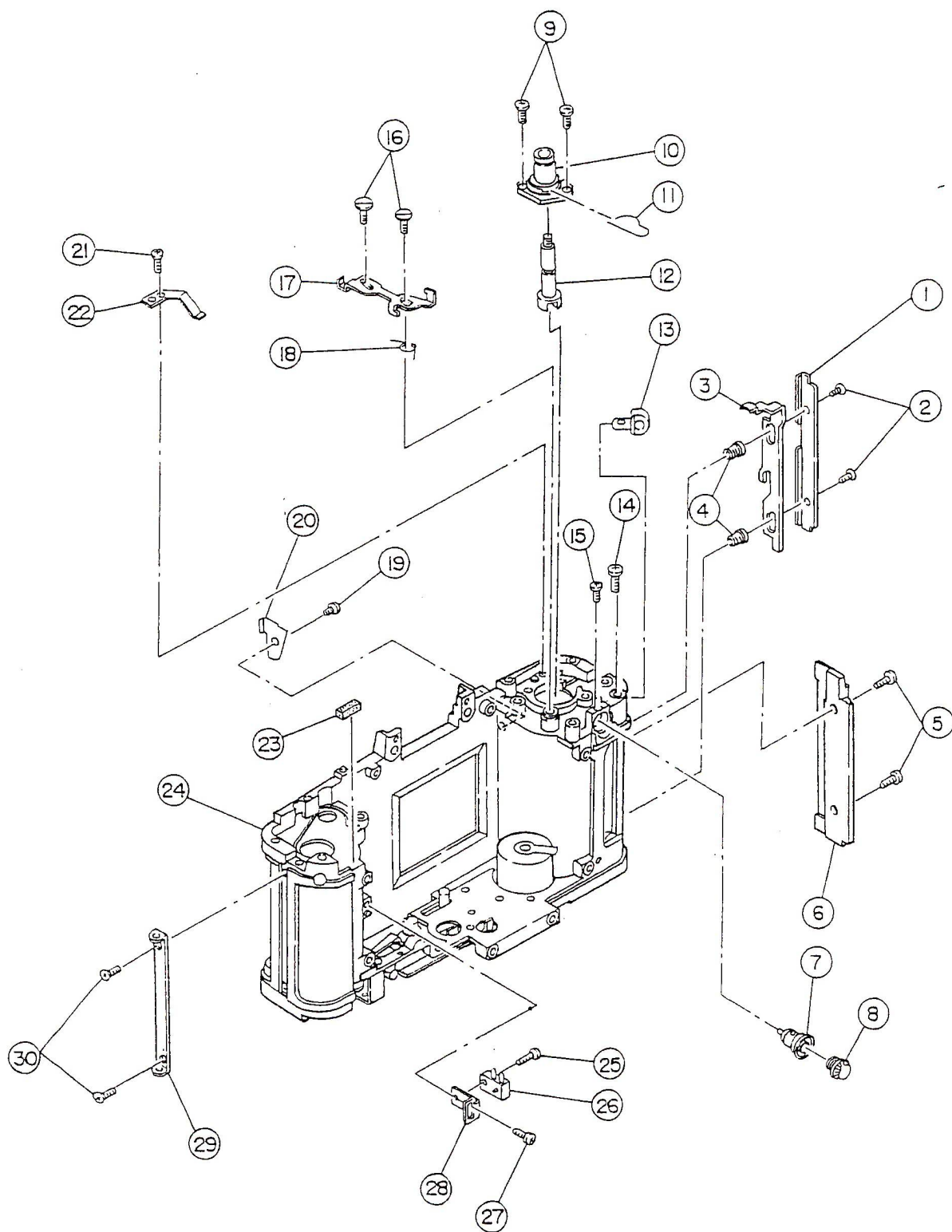




| PARTS NO.   | DESCRIPTION                   | Q'TY |
|-------------|-------------------------------|------|
| 1 66101525  | E RING (E-15)                 | 2    |
| 2 15963500  | IDLE GEAR CLAW SPRING         | 1    |
| 3 1AE61110  | IDLE GEAR CLAW                | 1    |
| 4 61912026  | ME BLOCK PLATE S.S            | 2    |
| 5 1AE67900  | ME BLOCK PLATE                | 1    |
| 6 13965003  | SPROCKET SPRING               | 1    |
| 7 61925026  | ME INTERLOCK LEVER S.S        | 1    |
| 8 15966600  | ME LEVER SPRING               | 1    |
| 9 1AE67400  | ME INTERLOCK LEVER METAL      | 1    |
| 10 1AE67300 | ME INTERLOCK LEVER            | 1    |
| 11 15962410 | W. CLAW SPRING                | 1    |
| 12 1AEAA340 | W. INTERLOCK PLATE ASS'Y      | 1    |
| 13 14786300 | COUNTER GEAR (1)              | 1    |
| 14 13962810 | ME CONNECTING LEVER SPRING    | 1    |
| 15 13964900 | ME-W LEVER SHAFT (2)          | 1    |
| 16 1AE67610 | ME-W LEVER                    | 1    |
| 17 1AE67200 | ME-W LEVER SHAFT              | 1    |
| 18 1AE60200 | W. GEAR                       | 1    |
| 19 *        | W. BASE PLATE ASS'Y           | 1    |
| 20 61823526 | W. BASE PLATE S.S             | 1    |
| 21 1AEAA360 | SPOOL GEAR ASS'Y              | 1    |
| 22 63929026 | STRAP HOLDER S.S              | 1    |
| 23 61823026 | COUNTER BASE PLATE S.S        | 1    |
| 24 61813526 | COUNTER BASE PLATE S.S        | 1    |
| 25 1AE63800 | F. COVER RETAINING NUT        | 1    |
| 26 1AE67800 | ME COUPLING LEVER             | 1    |
| 27 1AE67710 | ME COUPLING RING              | 1    |
| 28 15989200 | COUNTER NAME PLATE            | 1    |
| 29 1AE36310 | COUNTER GEAR (2)              | 1    |
| 30 1AE36620 | COUNTER SPRING                | 1    |
| 31 1AE36910 | C. RELEASE LEVER SPRING       | 1    |
| 32 61902026 | W. HANGAR SPRING S.S          | 2    |
| 33 1AE63630 | W. HANGAR SPRING              | 1    |
| 34 1AEAA450 | COUNTER BASE PLATE (K) ASS'Y  | 1    |
| 35 1AE06100 | W. SHAFT (A) ASS'Y            | 1    |
| 36 15662200 | INSIDE SPOOL                  | 1    |
| 37 *        | BODY                          | 1    |
| 38 1AE34010 | RELEASE SHAFT                 | 1    |
| 39 1AE34100 | RELEASE SHAFT SPRING          | 1    |
| 40 1AA10510 | STRAP HOLDER                  | 1    |
| 41 61824022 | W. STOPPER S.S                | 1    |
| 42 61902026 | COUNTER INDICATOR S.S         | 1    |
| 43 1AE36520 | COUNTER INDICATOR             | 1    |
| 44 61823026 | W. STOPPER S.S                | 1    |
| 45 1AE64000 | W. STOPPER                    | 1    |
| 46 1AE64100 | ANTI-REVERSING LEVER          | 1    |
| 47 1AE64200 | ANTI-REVERSING COLLAR (UPPER) | 1    |
| 48 13965810 | ANTI-REVERSING LEVER SPRING   | 1    |
| 49 15964700 | SPROCKET SHAFT                | 1    |
| 50 15937020 | SPROCKET                      | 1    |

1-3, 19 1AEAA350 W. BASE PLATE ASS'Y 1

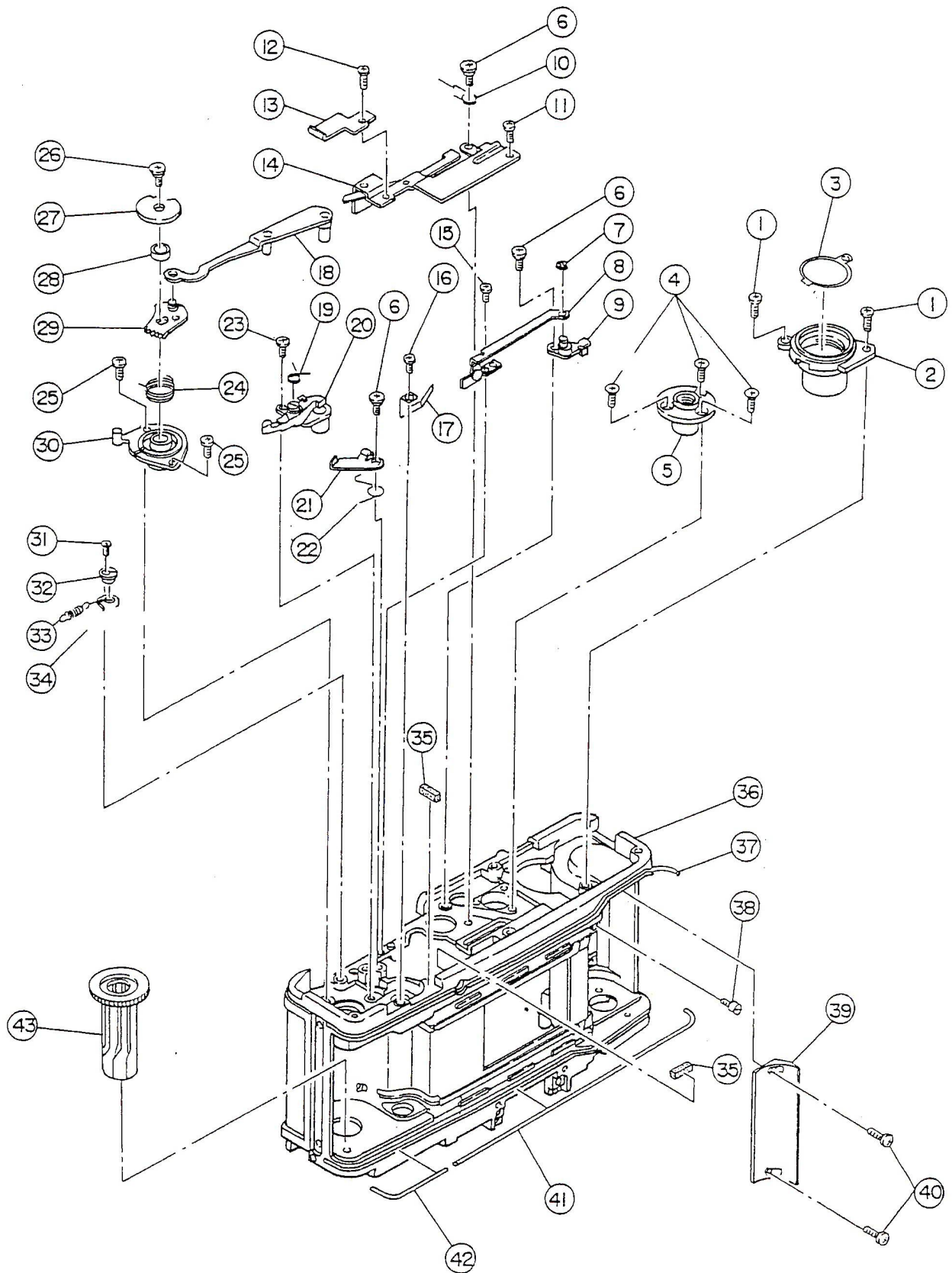
Note : Parts marked \* are not available.



|    | PARTS NO. | DESCRIPTION                 | Q'TY |
|----|-----------|-----------------------------|------|
| 1  | 1AE10500  | LOCK PLATE COVER            | 1    |
| 2  | 61812529  | LOCK PLATE COVER S.S        | 2    |
| 3  | 13912010  | BACK COVER LOCK PLATE       | 1    |
| 4  | 1AE12400  | BACK COVER LOCK PLATE SHAFT | 1    |
| 5  | 66001068  | FRONT BASE (S) S.S          | 2    |
| 6  | 1AE17100  | FRONT BASE (S)              | 1    |
| 7  | 1AEAA380  | SYNCHRO SOCKET ASS'Y        | 1    |
| 8  | 13913800  | SYNCHRO CAP                 | 1    |
| 9  | 61924026  | REWIND SHAFT HOLDER S.S     | 2    |
| 10 | 1AE43620  | REWIND SHAFT HOLDER         | 1    |
| 11 | 13934310  | REWIND SHAFT SPRING         | 1    |
| 12 | 15934200  | REWIND SHAFT                | 1    |
| 13 | 1AA10510  | STRAP HOLDER                | 1    |
| 14 | 63929026  | STRAP HOLDER S.S            | 1    |
| 15 | 61913022  | SYNCHRO SOCKET S.S          | 1    |
| 16 | 1AE41420  | ISO STOPPER LEVER S.S       | 2    |
| 17 | 1AE41230  | ISO STOPPER LEVER           | 1    |
| 18 | 1AE35230  | ISO STOPPER LEVER SPRING    | 1    |
| 19 | 61911526  | CARTRIDGE GUIDE S.S         | 1    |
| 20 | 1AE10700  | CARTRIDGE GUIDE             | 1    |
| 21 | 61912522  | LOCK PLATE SPRING S.S       | 1    |
| 22 | 13912100  | LOCK PLATE SPRING           | 1    |
| 23 | 1AE10200  | BODY MOQUETTE (A)           | 1    |
| 24 | *         | BODY                        | 1    |
| 25 | 61914526  | EXPOSURE CHECK SWITCH S.S   | 1    |
| 26 | 1AE34200  | EXPOSURE CHECK SWITCH       | 1    |
| 27 | 66001090  | CHECK SWITCH PLATE S.S      | 1    |
| 28 | 1AE34400  | CHECK SWITCH PLATE          | 1    |
| 29 | 1AE10400  | HINGE SHAFT HOLDER          | 1    |
| 30 | 61813022  | HINGE SHAFT HOLDER S.S      | 2    |

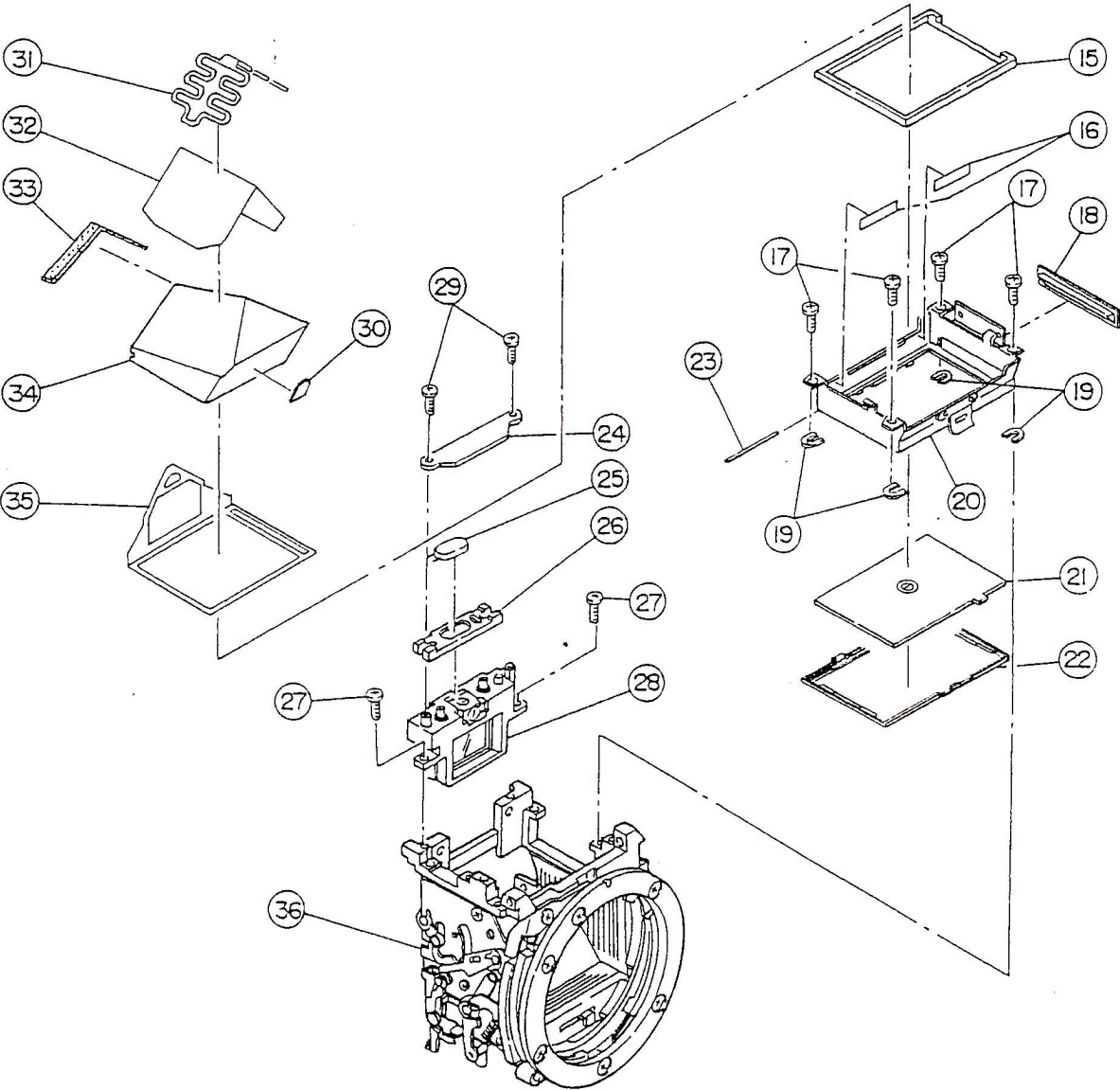
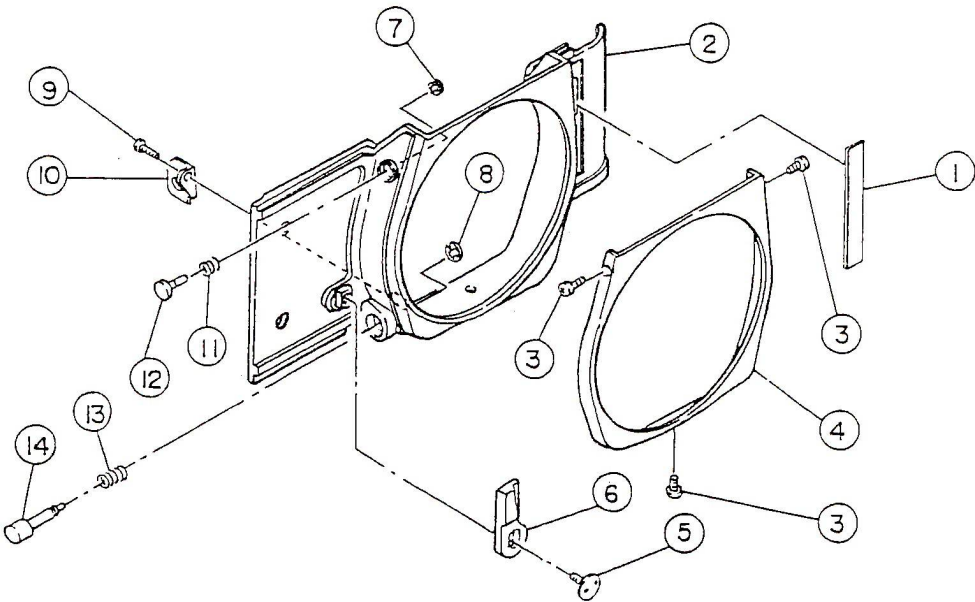
Note : Parts marked \* is not available.





|     | PARTS NO. | DESCRIPTION                  | Q'TY |
|-----|-----------|------------------------------|------|
| 1   | 61914026  | BATTERY CASE S.S             | 2    |
| 2   | *         | BATTERY CASE                 | 1    |
| 3   | 1AE12310  | BATTERY CASE CONTACT (B)     | 1    |
| 4   | 61824022  | TRIPOD SOCKET S.S            | 3    |
| 5   | 1AE10300  | TRIPOD SOCKET                | 1    |
| 6   | 14743710  | SR LEVER (3) SHAFT SCREW     | 3    |
| 7   | 66001225  | E RING (E-12)                | 1    |
| 8   | 1AEAA310  | SR LEVER ASS'Y               | 1    |
| 9   | 1AEAA300  | SR LEVER (3) ASS'Y           | 1    |
| 10  | 14761400  | WINDING STOPPER LEVER SPRING | 1    |
| 11  | 61913026  | WINDING STOPPER LEVER S.S    | 1    |
| 12  | 61914026  | SR LOCK LEVER RETAINER S.S   | 1    |
| 13  | 1AE22300  | SR LOCK LEVER RETAINER       | 1    |
| 14  | 1AEAA280  | WINDING STOPPER LEVER ASS'Y  | 1    |
| 15  | 61912026  | SR LEVER ASS'Y S.S           | 1    |
| 16  | 66001041  | SPROCKET RELEASE SPRING S.S  | 1    |
| 17  | 1AE61400  | SPROCKET RELEASE SPRING      | 1    |
| 18  | 1AEAA290  | SM SET LEVER ASS'Y           | 1    |
| 19  | 15967700  | OR STOP LEVER SPRING         | 1    |
| 20  | 1AEAA320  | SPROCKET METAL ASS'Y         | 1    |
| 21  | 14743900  | SR LOCK LEVER                | 1    |
| 22  | 14744000  | SR LOCK SPRING               | 1    |
| 23  | 63912526  | SPROCKET METAL S.S           | 1    |
| 24  | 15262200  | WINDING SPRING               | 1    |
| 25  | 66001068  | WINDING SHAFT HOLDER S.S     | 2    |
| 26  | 66001037  | SET CAM FIXER S.S            | 1    |
| 27  | 14761022  | SET CAM FIXER                | 1    |
| 28  | 14767110  | SET CAM RING                 | 1    |
| 29  | 1AEAA330  | SET CAM PLATE ASS'Y          | 1    |
| 30  | 15661100  | WINDING SHAFT HOLDER         | 1    |
| 31  | 61813526  | ANTI-REVERSING CLAW S.S      | 1    |
| 32  | 14763700  | ANTI-REVERSING CLAW COLLAR   | 1    |
| 33  | 14763600  | ANTI-REVERSING CLAW SPRING   | 1    |
| 34  | 14763800  | ANTI-REVERSING CLAW          | 1    |
| 35  | 1AE10200  | BODY MOQUETTE (A)            | 2    |
| 36  | *         | BODY                         | 1    |
| 37  | 1AE12810  | BODY SHIELD (LOWER)          | 1    |
| 38  | 1AA11100  | FILM GUIDE PIN               | 1    |
| 39  | 1AE11000  | REGISTER COVER               | 1    |
| 40  | 63913526  | REGISTER COVER S.S           | 2    |
| 41  | 1AE12720  | BODY SHIELDE (UPPER)         | 1    |
| 42  | 1AE12900  | BODY SHIELD (S)              | 1    |
| 43  | 15964101  | OUTSIDE SPOOL                | 1    |
| 2,3 | 1AEAA270  | BATTERY CASE ASS'Y           | 1    |

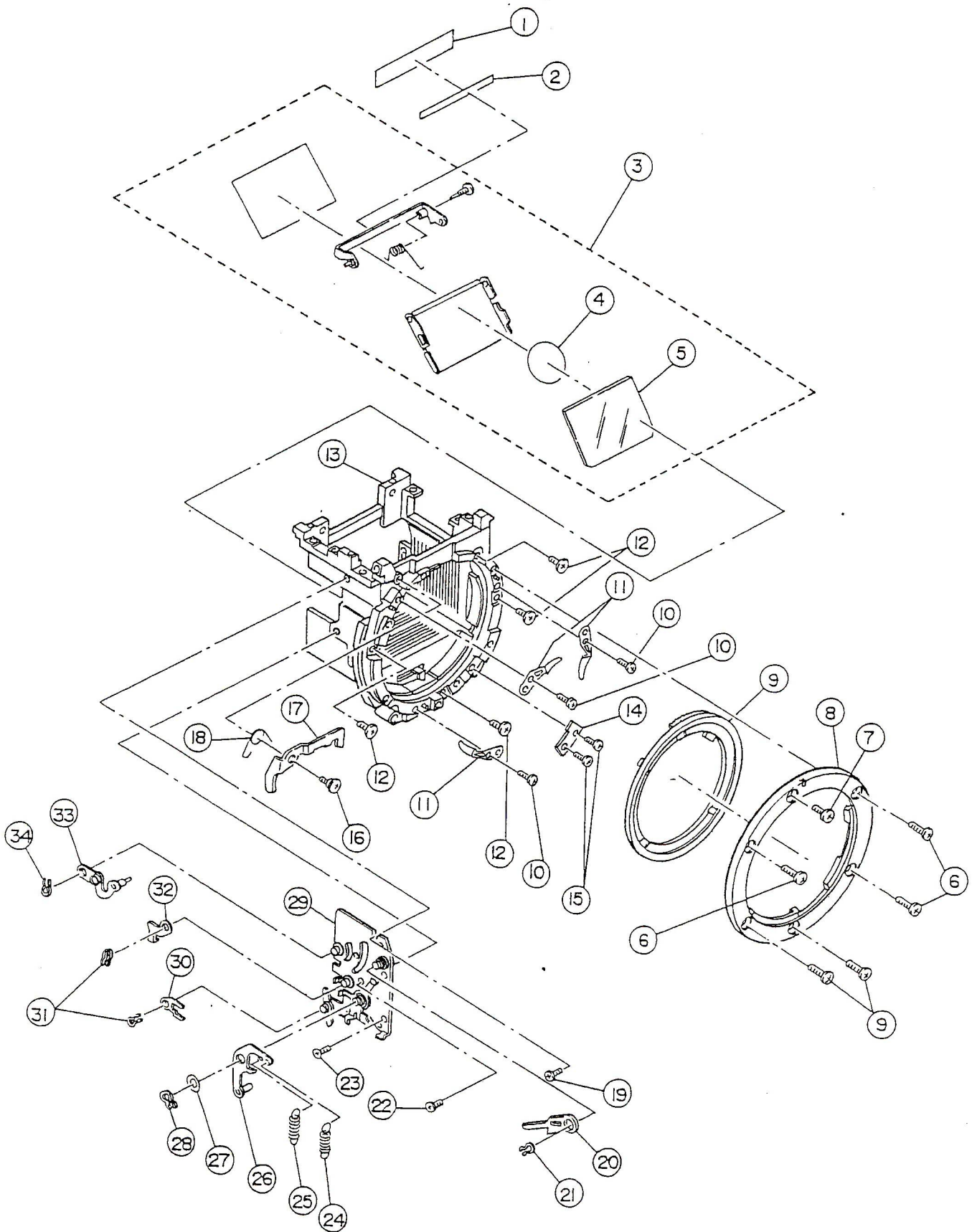
Note : Parts marked \* are not available.



| PARTS NO.       | DESCRIPTION                     | Q'TY |
|-----------------|---------------------------------|------|
| 1 1AE16910      | PATTERN COVER                   | 1    |
| 2 *             | FRONT BASE                      | 1    |
| 3 69102062      | FRONT COVER S.S                 | 3    |
| 4 1AE17520      | FRONT COVER                     | 1    |
| 5 1AE18100      | SELF-TIMER LEVER S.S            | 1    |
| 6 1AE18000      | SELF-TIMER LEVER                | 1    |
| 7 66101225      | E RING (E-12)                   | 1    |
| 8 66102025      | E RING (E-20)                   | 1    |
| 9 69103066      | APERTURE BUTTON HOLDER S.S      | 1    |
| 10 1AE17900     | APERTURE BUTTON HOLDER          | 1    |
| 11 13181800     | LENS LOCK BUTTON SPRING         | 1    |
| 12 17422401     | LENS LOCK BUTTON                | 1    |
| 13 17418700     | APERTURE BUTTON SPRING          | 1    |
| 14 1AE17740     | APERTURE BUTTON                 | 1    |
| 15 1AE84600     | PENTA SPACER                    | 1    |
| 16 1AE84900     | PRISM SPACER                    | 2    |
| 17 63913526     | PENTA PRISM HOLDER S.S          | 4    |
| 18 1AE84700     | S. INDICATER PRISM              | 1    |
| 19 13987200     | FOCUS ADJUSTMENT WASHER (t:0.2) | 4    |
| 13987400        | FOCUS ADJUSTMENT WASHER (t:0.3) | 4    |
| 13984000        | FOCUS ADJUSTMENT WASHER (t:0.4) | 4    |
| 13987100        | FOCUS ADJUSTMENT WASHER (t:0.5) | 4    |
| 13989400        | FOCUS ADJUSTMENT WASHER (t:0.6) | 4    |
| 13989800        | FOCUS ADJUSTMNET WASHER (t:0.7) | 4    |
| 20 1AE08100     | PENTA PRISM HOLDER ASS'Y        | 1    |
| 21 17484900     | FOCUSING GLASS                  | 1    |
| 22 1AE84300     | PG HOLDER                       | 1    |
| 23 17486200     | PG PIN                          | 1    |
| 24 17424500     | SHOE CONTACT HOLDER             | 1    |
| 25 1AEAE200     | SPD ASS'Y                       | 1    |
| 26 1AE85100     | LIGHT SENSOR HOLDER             | 1    |
| 27 61914026     | EYE-PIECE HOLDER ASS'Y S.S      | 2    |
| 28 1AEAB160     | EYE-PIECE HOLDER ASS'Y          | 1    |
| 29 69114076     | SHOE CONTACT HOLDER S.S         | 2    |
| 30 1AA82200     | PENTA PRISM RETAINING PLATE     | 1    |
| 31 15986200     | PENTA PRISM FIXER               | 1    |
| 32 17484210     | PENTA COVER                     | 1    |
| 33 13985800     | PENTA DUST-PROOF MOQUETTE       | 1    |
| 34 1AE84200     | PENTA PRISM                     | 1    |
| 35 1AE84510     | FINDER MASK FRAME               | 1    |
| 36 1AEAB010     | MIRROR BOX ASS'Y (See Page 8,9) | 1    |
| 2,5-14 1AEAA240 | FRONT BASE ASS'Y                | 1    |

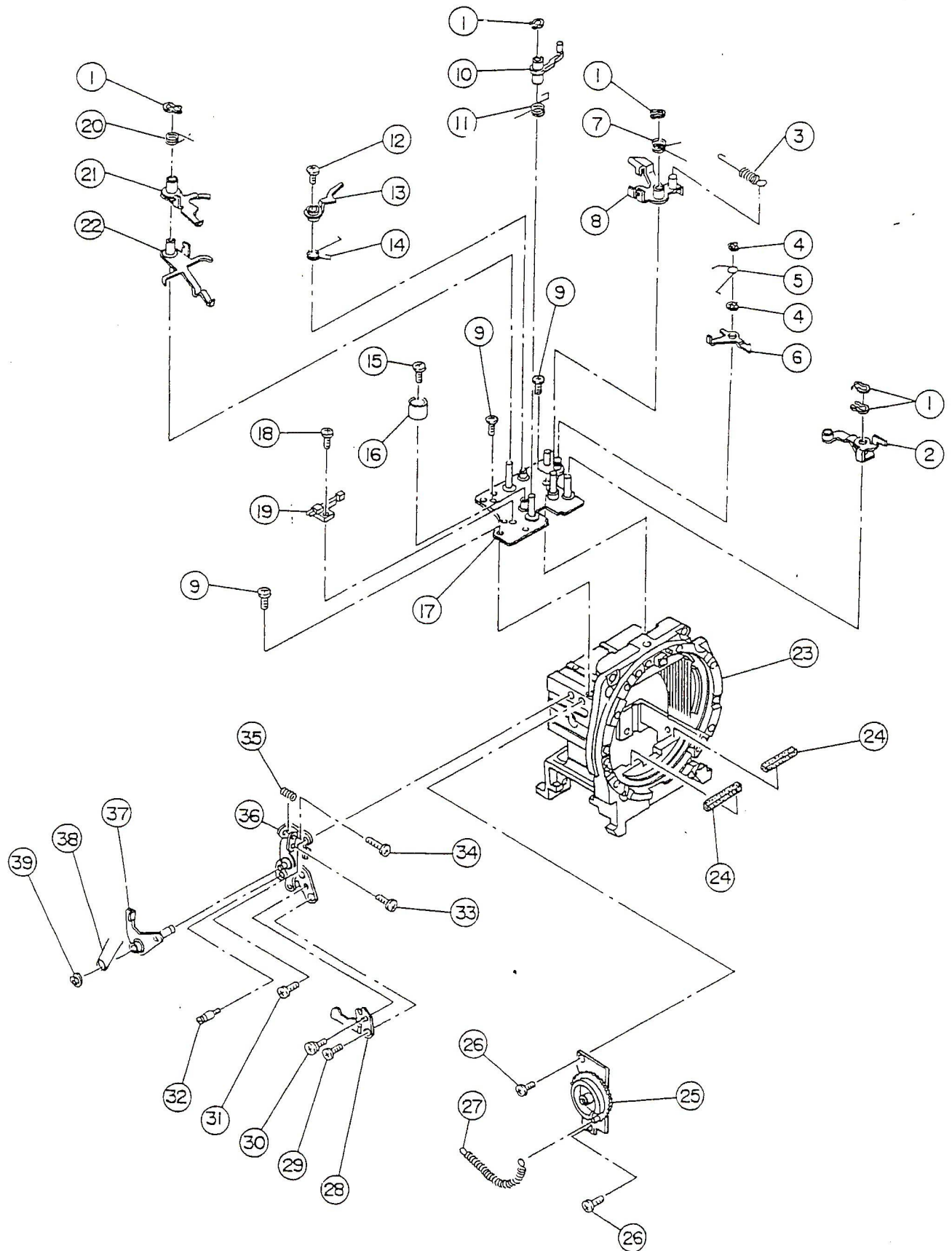
Note : Parts marked \* is not available.





| PARTS NO.     |          | DESCRIPTION                            | Q'TY |
|---------------|----------|--|------|
| 1             | 15987800 | S. LIGHT-PROOF PLATE                   | 1    |
| 2             | 15987910 | S. LIGHT-PROOF PLATE TAPE              | 1    |
| 3             | 1AEAB060 | MIRROR FRAME ASS'Y                     | 1    |
| 4             | 13977400 | MIRROR ADHESIVE TAPE                   | 1    |
| 5             | 17480100 | MIRROR                                 | 1    |
| 6             | 61925522 | BODY MOUNT S.S                         | 5    |
| 7             | 66001138 | BODY MOUNT S.S                         | 1    |
| 8             | 1AE81000 | BODY MOUNT                             | 1    |
| 9             | 13982310 | F. STOP CONNECTING RING                | 1    |
| 10            | 61913026 | MOUNT SPRING S.S                       | 3    |
| 11            | 13981230 | MOUNT SPRING                           | 3    |
| 12            | 66001041 | F. STOP CONNECTING RING S.S            | 4    |
| 13            | *        | MIRROR BOX                             | 1    |
| 14            | 13981301 | MOUNT STOPPER                          | 1    |
| 15            | 61913026 | MOUNT STOPPER S.S                      | 2    |
| 16            | 14781600 | LOCK LEVER SHAFT                       | 1    |
| 17            | 1AE80700 | LOCK LEVER                             | 1    |
| 18            | 14781700 | LOCK LEVER SPRING                      | 1    |
| 19            | 63911526 | MC BASE PLATE S.S                      | 1    |
| 20            | 13976422 | MCL-3                                  | 1    |
| 21            | 66172522 | GS RING (GS-25)                        | 1    |
| 22            | 61912026 | MC BASE PLATE S.S                      | 1    |
| 23            | 61812526 | MC BASE PLATE S.S                      | 1    |
| 24            | 13976100 | MC RESTORE SPRING                      | 1    |
| 25            | 13976000 | MC DRIVING SPRING                      | 1    |
| 26            | 06529700 | MCL-1 ASS'Y                            | 1    |
| 27            | 60223122 | WASHER                                 | 1    |
| 28            | 66173022 | GS RING (GS-30)                        | 1    |
| 29            | *        | MC BASE PLATE                          | 1    |
| 30            | 1AE74100 | MCL-7                                  | 1    |
| 31            | 66172022 | GS RING (GS-20)                        | 2    |
| 32            | 13977020 | MCL-5                                  | 1    |
| 33            | 06521400 | MCL-4 ASS'Y                            | 1    |
| 34            | 66172022 | GS RING (GS-20)                        | 1    |
| 20, 21, 24-32 |          | 06519500 MC BASE PLATE ASS'Y           | 1    |
| 1-34          |          | 1AEAB010 MIRROR BOX ASS'Y (See Page 9) | 1    |

Note : Parts marked \* are not available.



| PARTS NO.   |          | DESCRIPTION                | Q'TY |
|---|----------|----------------------------|------|
| 1   | 66172022 | GS RING (GS-20)            | 5    |
| 2   | 1AEAB100 | QRL-7 ASS'Y                | 1    |
| 3   | 1AE80400 | QRL-2 SPRING               | 1    |
| 4   | 66101525 | E RING (E-15)              | 2    |
| 5   | 13973210 | QRL-6 SPRING               | 1    |
| 6   | 13973120 | QRL-6                      | 1    |
| 7   | 13971620 | QRL-1 SPRING               | 1    |
| 8   | 06520100 | QRL-1 ASS'Y                | 1    |
| 9   | 61912026 | QR BASE PLATE S.S          | 3    |
| 10  | 14772500 | QRL-4                      | 1    |
| 11  | 1AE72600 | QRL-4 SPRING               | 1    |
| 12  | 66001046 | QRL-5 S.S                  | 1    |
| 13  | 1AEAB120 | QRL-5 ASS'Y                | 1    |
| 14  | 15978730 | QRL-5 SPRING               | 1    |
| 15  | 66001046 | QR STOPPER S.S             | 1    |
| 16  | 1AE71010 | QR STOPPER                 | 1    |
| 17  | *        | QR BASE PLATE              | 1    |
| 18  | 61922526 | REVOLVING LIMIT SWITCH S.S | 1    |
| 19  | 1AA57310 | REVOLVING LIMIT SWITCH     | 1    |
| 20  | 13972430 | QRL-3 SPRING               | 1    |
| 21  | 06520200 | QRL-2 ASS'Y                | 1    |
| 22  | 1AEAB110 | QRL-3 ASS'Y                | 1    |
| 23  | *        | MIRROR BOX                 | 1    |
| 24  | 1AE80510 | MIRROR CUSHION             | 2    |
| 25  | 1AEAB040 | AVR ASS'Y                  | 1    |
| 26  | 61912026 | AVR ASS'Y S.S              | 2    |
| 27  | 14783000 | APERTURE RESISTOR SPRING   | 1    |
| 28  | 1AEAB050 | ML-6 ASS'Y                 | 1    |
| 29  | 63911526 | ML-6 S.S                   | 1    |
| 30  | 13983400 | ML-6 S.S                   | 1    |
| 31  | 61812526 | ML BASE PLATE S.S          | 1    |
| 32  | 1AE80600 | AVR SPRING POST            | 1    |
| 33  | 63914526 | ML BASE PLATE SCREW        | 1    |
| 34  | 63915522 | ML BASE PLATE SCREW        | 1    |
| 35  | 13983300 | ML BASE PLATE SPRING       | 1    |
| 36  | *        | ML BASE PLATE              | 1    |
| 37  | 1AEAB130 | ML-5 ASS'Y                 | 1    |
| 38  | 1AE80300 | ML-4/5 SPRING              | 1    |
| 39  | 66101525 | E RING (E-15)              | 1    |
| 1-8, 10-22      1AEAB020      QR BASE PLATE ASS'Y               |          |                            | 1    |
| 33-39              1AEAB039      ML BASE PLATE ASS'Y            |          |                            | 1    |
| 1-39                1AEAB010      MIRROR BOX ASS'Y (See Page 8) |          |                            | 1    |

Note : Parts marked \* are not available.



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